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ESSAYS AND CASES.

ART. I.—*Practical Essays on Medical Education and the Medical Profession, in the United States.*—BY THE EDITOR.

ESSAY I.

SELECTION AND PREPARATORY EDUCATION OF PUPILS.

Of the various occupations in society, scarcely one requires greater talent and attainment, than the medical profession. This is especially true in the United States, where almost every practitioner must be at the same time, physician, surgeon and apothecary. Obvious as this proposition is to many, its truth, unfortunately, is not generally perceived by those who are about to dedicate their sons to the profession,—in other words, by the persons who above all others should feel and acknowledge its reality. Hence it results, that the ranks of the profession are in a great degree filled up with recruits, who are deficient, either in abilities or acquirements (too often indeed in both,) who thus doom it to a mediocrity, incompatible both with its nature and objects. Other causes contribute to its degradation; but this I am persuaded is one of the most frequent and most difficult to obviate. Still much might be done, if those who have the power, would open their eyes to the evil, and exert their influence in its suppression.

Few of those who are put to the study of medicine, can be aware of the magnitude of the undertaking, or of the insufficiency of their capacity and preparation; for the obvious reason, that they are in general young and inexperienced. There are, however, two classes of persons, who might be expected to judge more correctly, and have much in their power. I refer to parents and physicians, both of whom rather than our sons, should feel responsible to society on this subject; and to them I beg leave respectfully to address myself.

In the selection of boys for the study of medicine, many circumstances entirely disconnected with their fitness, too often exert a dominant influence; when their sway should be subordinate, or even regarded as entirely inadmissible. A neighbouring physician wants a student to reside in his office; or one son of the family is thought too weakly to labour on the farm or in the work shop; he is indolent and averse to bodily exertion; or addicted to study, but too stupid for the Bar, or too immoral for the Pulpit; the parents wish to have one gentleman in the family, and a *doctor* is a *gentleman*:—these and many other extraneous considerations, not unfrequently decide the choice and swell the numbers, while they impair the character of the profession.

Both parents and physicians should know, that boys of feeble frame and unsound constitution, cannot endure study, and are best strengthened by hard labour; they should not, indeed, ever be put to the learned professions, unless they chance to possess extraordinary genius. Every physician must have seen many, who dragged out the whole period of their brief and reluctant pupilage, with dyspepsia, a pain in the breast, or hypochondraism; conditions which will preclude all intense and successful application; or render it the cause of some other distressing malady, which terminates in premature death.

But it is not sufficient that boys selected for the study of medicine, should have good constitutions; they ought, equally, to be endowed with vigorous and inquiring minds. Without these, whatever may be the appearances of success, they must at last make incompetent physicians. It is especially

and indispensably necessary, that they possess, in a high degree, the faculties of observation and judgment; without which, they can neither comprehend the principles of the science, nor apply them correctly in the treatment of diseases. Notwithstanding this obvious fact, hundreds are put to the study of medicine, whose utmost grasp of intellect never encompasses the first principles of the science. As a matter of course, they slur over every difficult proposition, and afterwards grope their way for forty years, unconsciously committing 'sins of omission or commission,' throughout the whole of that long period. It is in vain to rely on society to correct this great evil, by discriminating among the candidates for their confidence; for the knowledge necessary to a correct selection, does not exist among them. In the other learned professions, this species of empyricism cannot be practised. The incompetent Divine, at most but occupies the place of an abler teacher, and the superficial Lawyer, is either driven from the Bar, by the exposure of his errors, or they are rendered harmless, by the skill of competent associates. But the physician, who has passed through the usual forms of a professional education without the capacity to improve by his opportunities, is presumed by the people, to be qualified for every emergency; and sometimes even preferred to the ablest practitioners.

The student of medicine should not only be of sound understanding, but imbued with ambition. A mere love of knowledge is not to be trusted to, for the greatest lovers of knowledge, are not unfrequently deficient in executive talents, and go on acquiring without learning how to appropriate. Let parents, therefore, not be misled by the signs which indicate a fondness for study, unless the desire involves a feeling of emulation. A thirst for fame, is indeed a safer reliance, than a taste for learning; as it generates those executive efforts, which are indispensable to the successful practice of the profession.

Further, the temperament of the youth, should be that of industry and perseverance; without which he will balk at every difficulty, and require close watching through all sta-

ges of his pupilage. An indolent or irresolute student, whatever may be his talents, can never figure as a physician, and should without delay be apprenticed to some vocation—in which the destruction of limbs and life will not be the inevitable consequence of idleness and discouragement.

Finally, parents who are too poor to afford their sons the necessary opportunities, should not aim at making them physicians. If we now and then see one, whose talents, ambition and enterprize, have enabled him to acquire distinction, in despite of every obstacle, we meet with many more, who all their lives remain unfinished and imperfect, from the want of adequate time and opportunities, while engaged in their professional studies. I am the more disposed to insist on these truths, because so many fathers are ignorant of what is really necessary to make their sons good physicians; and place them to the study of physic before they have accurately counted the cost. Of all the causes which impede the progress of medicine in the United States, not one is more operative than this. The amiable vanity in which it originates, can scarcely be condemned; but parents should be admonished to look at the consequences of such an indulgence of feeling. Under the most limited opportunities, a son can make acquirements that may satisfy a fond father, who knows but little of the extent and complexity of the medical sciences; to be prepared, however, for the various exigencies of the profession, is a much more difficult affair. Paternal affection may blind us to the errors of our sons, but cannot obviate their prejudicial influence on society.

Having briefly considered the moral and physical qualities which fit young men for the study of medicine, I come now to say, that a majority of those who are selected for that purpose, are deficient in one or both classes of requisites. Let us enquire into the principal causes of this state of things —so unfavourable to the dignity of the profession, and prejudicial to the interests of humanity.

The current opinion, that men of slender talents are competent to the practice of physic, is obviously a great cause why so many feeble minded boys are dedicated to its study.

There never existed a time, when this opinion was well founded. In past ages, when medicine could not claim a place in the ranks of philosophy, it was still a science of observation, and called for an acute and discriminating mind. Though it could not rise above the grade of an experimental art, it never sunk to a trade, the results of which were purely accidental, but when it fell into the hands of the imbecile or the unprincipled. At the present time, when the intricacies of the human structure have been unravelled, and many of its functions are understood; when the accumulated experience of centuries has developed numerous general truths, and the spirit of inductive philosophy has arranged them into a science—imperfect it is true, but still a science—when chemistry, natural philosophy, botany and natural history, have become essential preliminary branches, nothing can be more adventurous, than to engage in the study of the profession without a logical and comprehensive mind.

Another cause of the evil which we deprecate, is the liberal proportion of inferior men, who unfortunately belong to the profession, and so often succeed in acquiring business and popularity. An observation of this fact, not a little mortifying to the more talented members of the profession, encourages parents to set apart for the study of medicine, those sons who are least remarkable for strength of mind; reversing, the better class, for pursuits which in their opinion require more vigour of intellect, or promise greater distinction. Thus a degraded state of the profession is made to perpetuate itself, by influencing, not only the ignorant but the well informed; for when a father, who has a just estimate of the strong talents necessary to the study and practice of physic, apprehends that a son, of whose genius he is proud, may, on entering the arena, meet with many whose emulation is vitiated with envy; who labour to please rather than preserve their patients; or whose skill consists more in the arts of imposture than of cure; it is not unnatural for him to shrink from the contemplation of the contest.

The root of this great evil is planted in society itself. Some persons are too dull to distinguish among the mem-

bers of the profession, others allow themselves to be captivated by pleasant manners, and not a few call for *cheap doctoring*, all of which tend directly to elevate false pretension and depress real merit.

But there are causes which attract, as well as repel, young men of genius from the profession.

It will not be denied, that no passion is more intense and universal, than the love of gain. If not the first to be developed, it is the last to be extinguished; and, taken in the aggregate, perhaps no other exercises so much sway over the course and conduct of man. In most parts of the United States, the practice of medicine offers but little to gratify this desire, in comparison with commercial pursuits; and hence we find, that *they* exert an influence, which draws into the vortex of trade, no inconsiderable part of the talents and enterprise of the nation.

Strong, however, as the attractions of commerce unquestionably are, their influence is trifling, compared with those of law and politics. In no other country is the union of those two sciences so intimate, as in the United States. The regular course of promotion is from the county court house to the capital of the state, thence to the halls of congress, and, finally to the presidential palace; whose lofty entablatures, by a kind of looming, are seen with magical effect from every part of the union.

It is marvellous to see with what lustre the 'seals of office glitter in the eyes' of the good people of these United States. The whole world furnishes no parallel case. The number of state and federal officers is so great, as to awaken political aspirations on our entire male population; and some of them are invested with sufficient dignity, power, and patronage, to excite the most intense emulation—I ought rather to say, the angriest rivalry. Thus are the genius and ambition of the nation drawn into the race of political glory. But for this, the law would scarcely exert stronger attractions upon the talent of the country, than medicine; for its own intrinsic rewards are not of a higher order, as the problems which it offers, do not require for their solution, a greater amount of

intellect, than the practice of medicine. How long this will continue to be the case, it is difficult to foresee; but as our population is progressive, while the number of political offices is nearly stationary, we may hope that the time is not distant, when the proportion of talented youth who are dedicated to the study of physic, will be much greater than at present.

The consequences of this deficiency of talent in the profession, are of serious import to the science and to the people at large. It is unquestionably one of the causes, which retard the progress of discovery and improvement. Of the thousands who annually go forth with diplomas or licenses, or without either, to engage in the practical duties of the profession, very few ever contribute a single new fact to its archives, or communicate an impulse to the minutest wheel in its complicated machinery. Acting on the precepts of others, they may, it is true, do some good, but they also do much harm; while to the great work of revising and correcting the principles of the science, they are of course utterly incompetent.

But this incompetency is not the effect of inferior *talents* only, it results perhaps in an equal degree, from want of education and mental discipline, on the extent and causes of which I shall now proceed to speak.

Although medicine is ranked with the *learned* professions, not a few of its professors are signally deficient in learning.* This is the case not only in the Western states, where for obvious reasons it might be expected; but in almost every part of the union, with the exception of some of our large cities. Writing as I do for practical effect, and to promote *reform*, I am constrained to say, that even at this late period, the profession abounds in students and practitioners, who are radically defective in spelling, grammar, etymology, geography, arithmetic, and, I might add book-keeping, but that they generally apply themselves to the study of that important

*Of course, on this occasion, I expect the reader to understand the word *professor* as synonymous with *practitioner*, and not as referring to public teachers; whose commissions must be regarded as evidence of learning, should other proofs *happen* now and then to be wanting.

branch with a diligence which supplies the want of early opportunities. Grammar and spelling especially, (to use the language in which I once heard a physician speak of the circulation of the blood,) appear to be among the '*secret arcanums of nature which Dr. Hamilton said never would be found out.*' Nothing is more common than to commit gross violations of both, in the directions which we write for our patients; and, what is still more humbling to the pride of the profession, not a few of us never learn to spell the names, either of the medicines which we administer, or the diseases which we cure. Was this confined to unauthorized members of the profession, it would be an affair of little magnitude; but extending to many of the graduates, of *all* our Universities, it calls for unreserved exposure and unqualified reprehension. Before the Revolution, the schools of the Colonies were generally bad, and till lately those of the West were not fitted to impart a good elementary education; but at present they are so improved, as to leave no excuse, for the literary ignorance which disgraces the profession. The taint, however, is hereditary, and may yet run through several generations, unless the authoritative members of the faculty can be moved to unite their prescriptions upon it. It would certainly not be unreasonable to require, that every youth who aspires to connect himself with a liberal pursuit, should first learn how to spell and write his mother tongue with as much accuracy as a country schoolmaster; if either his genius or misfortunes preclude such acquirements, he had better take to some calling which does not demand them.

On reading the foregoing sentences to a friend, I found him sceptical as to their accuracy; which leads me to repeat, that *I* am entirely convinced of it. Nothing could be further from my heart, than a desire to disparage the character of a profession, to which, 'man and boy,' I have been attached for nearly thirty years; and to the advancement of which my humble exertions have been devoted for most of that period. During the time I have learned something of the literary and professional acquirements, of so many students and physicians, in and of, various parts of the Union, that I

cannot be mistaken in asserting, that the majority of the profession in America, are deficient in common school learning. If such be the fact, it should not be considered libellous to publish it, especially when done by one who claims no exemption from the imperfections which he deplores. So long as we 'measure ourselves by ourselves and compare ourselves among ourselves' we are not likely either to perceive or supply our defects. There can be no true reformation without a consciousness of its necessity; and if these remarks should contribute but in the slightest degree to excite it, I shall submit cheerfully to the odium which they may bring upon me, from those who find recrimination more convenient than improvement.

But is the education which our common schools confer, a sufficient preparation for the study of medicine? It certainly is not. To a familiar acquaintance with the branches which have been enumerated, the intended student of medicine, should add a competent knowledge of the elements of physical geography, general history, the art of composition, algebra, geometry, and mechanics. If these acquirements are not made before he enters on his professional studies, he will most probably remain without them through his whole life; the effects of which will be sufficiently obvious to others, if not felt by himself. After what has been said, concerning our deficiencies in the rudiments of learning, it will scarcely be supposed, that our acquaintance with the sciences of this second group, is such as to constitute a suitable introduction to medical studies. In truth, most of us live and die in utter ignorance of them. There *was* a time, when this ignorance, particularly of mechanical philosophy, would have been thought fatal to the success of a student of medicine. Our science was then, held to be a branch of general physics; and the laws of the living system, a mere modification of those which govern the operations of dead matter. I would be among the last to desire the revival of these exploded errors; but that we have passed from one extreme to another, seems to me an unquestionable fact. We cannot explain the phenomena of living bodies, *by* the principles of

natural philosophy, but at the same time are unable to comprehend them, without the aid of those principles. The functions of seeing, hearing, locomotion, respiration, and the circulation of the blood, can no more be understood without an acquaintance with the laws of natural philosophy, than the movements of the atmosphere or the heavenly bodies; but their agency in the two cases is widely different. In the movements of the universe, we behold *only* the influence of these principles; but in the functions of organized beings, they are subordinate to a vital power; the laws of which constitute the science of life, or physiology. Thus organized bodies present us with a case, in which the general laws of matter are not repealed, but subjected to modification. Among all the works of God, we meet with no others which present such a great assemblage of agencies;—so diversified, yet co-operative—so admirably balanced—so harmonious, though complex and apparently involved—so productive of striking and beautiful forms! The human system is, indeed, the great mystery of creation, offering problems of matchless intricacy, and shrouded from human observation, by a veil which none should attempt to draw aside, without deep and varied preparation.

Suppose, what is not the fact, that to common-school attainments, our students added the first principles of mathematics, and the other sciences, constituting an academical course, would they *then* be properly qualified? I again answer they would not; and this brings us to the consideration of the learned languages, as an introduction to professional studies. I shall not attempt to travel over the whole ground.

The United States are, perhaps, the only civilized country in modern times, where it has been seriously doubted, whether the languages and literature of the ancients, should make a part of the studies of professional men. Of the various causes which have combined to suggest this question, one of the most operative is the spirit of liberal inquiry, which originated, and is cherished by, our free institutions. No people are so unshackled by prejudices and precedents; none so excursive; none so experimental, as the American. If

they do not 'try all things, and hold fast to that which is good,' they try many, and are strongly disposed to fix upon something new.

Another cause contributing to excite the same inquiry, is the successful acquisition of business by physicians, who lived and died in ignorance of Greek and Latin. With such examples before us, it was natural to ask, whether the study of the dead languages should be regarded as indispensable, or even beneficial, to the candidate for the honors of the profession; and not a few have, at all times, been ready to answer in the negative. In this inquiry there has been much to lead us astray.

Our forefathers, (most of whom were illiterate) emigrated to a forest, which it has been the occupation of their sons to subdue. In the prosecution of this Herculean task, and the subsequent establishment of institutions—political, social, and literary, they frequently experienced a want of appropriate means, and were compelled by the exigencies of their novel and trying situation, to think and act with originality. Hence arose a feeling of self reliance; a spirit of independence; a disregard of ancient customs; to which we may in a great degree ascribe that indifference to the languages and learning of antiquity, which characterizes the majority of our citizens.

Thus physical circumstances have, indirectly, exercised a mastery over moral causes, and given a deflection to our European character, which promises to become permanent. Moral causes, however, have contributed to the same effect. In migrating from the old world, our ancestors took leave of the institutions devoted to classical instruction; and hence a generation, of necessity, grew up in comparative ignorance. It would be in vain to hope, that a due respect for the learned languages, or even a conviction of their utility, could survive such a transition; and hence we find, that in the United States, a want of acquaintance with them, has been no serious obstacle to the attainment of high *relative* distinction, in any of the pursuits of society. How long this will be the case, it is not easy foresee. A perception of their value appears to be

returning; but I cannot suppose, that they will ever attain to the rank which they hold in the estimation of our elder brethren of Europe.

Meanwhile, it is the duty of those who can exercise any control over public sentiment in this respect, to exert themselves; and, if all who are interested in the dignity of the medical profession, could be brought to unite their efforts in favor of a more classical preparation of young men designed for the study, it cannot be doubted, that much might be accomplished, even in a single generation.

A physician who is ignorant of the Latin and Greek languages, whatever may be his genius and professional skill, must, to the eye of sound scholarship, appear defective and uncultivated. For more than two thousand years, these languages, especially the former, were the vehicles of all medical knowledge, except the little contributed by the Arabians; and, till within a century, our professional ancestors wrote, and prescribed, and thought, and lectured, in Latin. It was, indeed, to the profession a universal language; affording the means of an easy and accurate correspondence, among all the schools and physicians of Europe. Even down to the present time, the lectures in most of the Italian and German Universities, are delivered in Latin; while the examination of candidates, in many others, is conducted in the same language. Thus it has had a most protracted and intimate companionship with medicine; to the nomenclature of which it has freely lent its opulent vocabulary. Many of its words, no doubt, as well as those drawn from the dialects of Greece, are intended to convey, in their new situation, ideas materially different from their vernacular import; but in attempting to understand even these, the student is greatly assisted by an acquaintance with their primitive significations. With this knowledge of our dependence on the languages and literature of the ancients, to deny that the study of them must be beneficial, is scarcely less absurd, than to affirm, on the other hand, that every classical scholar is of necessity a physician.

But a thorough course of preparatory learning is useful, in more ways than one. It establishes early habits of application; generates a love of knowledge; trains the faculties; and inspires that firmness of purpose, which prevents him who puts his hand to the plough, from looking back. These are the cardinal virtues of a student; and they are in a great degree the effect of cultivation. We look instinctively at the grand and beautiful aspects of nature, but this is poetry, not philosophy. A poet delineates the surface, a philosopher decomposes the substance of things. One is born, the other called to his vocation. Education never made a great poet, nor nature a good philosopher. He is essentially the product of art. Toil is his destiny. He must sink a deep shaft, and draw up his treasures from below. Therefore he should be strengthened by timely and active effort. He must be inured to labour, and acquire adroitness in its performance. Hence he should begin early, for then only can suitable habits be formed. As well might he attempt, at twenty, to learn fencing, dancing, or a delicate and difficult art, as to commence at that age, without previous study, a course of philosophy. In both cases his awkwardness gives birth to the most discouraging failures. He feels, incessantly, the want of that strength and discipline, which are the offspring of practice, and are derived from it only. I would admonish parents to consider this subject anxiously and deeply. Many who place their sons to the study of medicine, are themselves illiterate, and do not apprehend the importance of early intellectual discipline. They transfer the objects of their care, from the plough to the doctor's shop; and require them to exchange the recipies of agriculture for those of pharmacy. Of the multitude, a few, by the force of an irrepressible genius, may rise to eminence; but the majority must lag forever in the under walks of the profession. Not having learned to climb, when the art might have been acquired, they may assault, but cannot scale the rugged steeps of science.

It is sorrowful to see, what every physician must have seen, the exertions of a generous young man consigned to the study of medicine, with a mind untutored and unstor-

ed;—to witness his ill directed efforts—strong but comparatively unavailing; his fitful application; his embarrassments under every difficulty; his disappointments and despondency; above all his mortification, from a consciousness of superior abilities united with a perpetual conviction of inferior progress. No devotedness to study, no intensity of ambition, no energy of intellect, not the whole combined, can make such an one what he would have been with early culture, nor raise him to the standard erected by his own vivid imagination. He may satisfy his friends, but must himself remain dissatisfied and unhappy.

But let us turn to a more common case. Suppose the youth as deficient in strength, as he is in discipline of mind;—what will then be his progress? To answer with a paradox, it will be *no* progress. There can be no advancement, when both nature and art array themselves in opposition. The first lessons of science, are to such a person, a 'sealed book;' which, like the worm, he may perforate, but can never open. Or, to use a more national figure, he is a militia man without courage or discipline, when one, at least, is indispensable to success. He cannot take captive, the vanguard of postulates, axioms, and definitions which lie in his way; and of course the citadel remains permanently hidden from his dim and uneducated vision. If dull young men *must* be apprenticed to medicine, common sense dictates, and common justice to them and society requires, that the pedagogue should begin his drillings early; for dunces are neither plastic nor acquisitive, and where the tree of knowledge grows slowly, it should not be planted late.

With these remarks I close this branch of our subject. If I have spoken freely, it has been as a friend, not an enemy of the profession. I have not written from the recesses of a cloister, but in the midst of society. Observation and personal experience have dictated every sentence, and afforded me satisfactory evidence of its truth. For this, moreover, I might appeal to all my enlightened brethren of the United States. Not one of them could venture to gainsay, what has been asserted; nor commend the apathy which connives at the

errors and abuses, which have been exposed. Let *them* begin the good work of reformation, and society will come quickly to their aid.

ART. II.—*An account of the Bilious Remittent Fever of* 1828; *as it prevailed in Circleville, and its vicinity; and, especially, along the line of the Ohio and Erie canal, near that town.* By DR. JOHN COOK BENNETT.

DURATION AND EXTENT OF THE EPIDEMIC.

In the country, it commenced about the middle of August (1828) and continued to the middle of October. In Circleville, it prevailed but a fortnight. It affected the inhabitants, generally, throughout that section of the valley of the Scioto in which the town is situated; but its chief prevalence was along the line of the canal, where a great number of labourers were engaged in the work of excavation. Among these it was so severe, as to cause a general panic; and, in many places, an entire suspension of labour, for several weeks.

REMOTE CAUSES.

The wind during the period to which I have referred, was variable, and sometimes vehement. The proportion of cloudy weather was considerable; but although showers were frequent, some parts of the season were too dry for active vegetation. The atmosphere at times was extremely humid, at others, hot and sultry.

In the neighbourhood of Circleville, there are ponds and milldams; and immediately about the town a moat, formed by two circular, concentric, embankments—a part of the antiquities of the Western country.* The whole of these collections of stagnant water were covered with a green pellicle; and to the decomposition of vegetable matter, of which they were the seats, we may, I think, refer the fever which occurred in their vicinity. But no such collections of stagnant water existed where the canal excavations were

*See Archæologia Americana.

carried on; notwithstanding which, the fever was there most prevalent and most fatal. Still, its cause, I conceive, was the same. The excavation was through alluvial soil, thoroughly impregnated with vegetable matter, long buried beneath the surface; and to the exhalations from this matter, exposed to the action of the rains, sun and air, we are justified in ascribing the extension of the epidemic to that quarter. We may even conjecture, that the miasms arising from the recently disenterred vegetable recrements, had a peculiar degree of virulence; since the most fatal cases occurred in their neighbourhood. The canal labourers, however, were subjected to the influence of several auxiliary or predisposing causes, which did not operate on the resident population of either town or country:—1. They were badly lodged, in temporary huts, cabins, and shanties; most of which had earthen floors;—2. They were greatly exposed to the heat of the sun, and to rain;—3. Their diet was frequently of an improper kind;—4. Some of them were strangers to the climate, and others unaccustomed to the kind of life which they then pursued:—But that the exhalations from the newly broken alluvial soil, were the chief cause, was rendered almost certain, by the fact, that the resident inhabitants of the country along the line of the canal, were more severely affected than others, living at a greater distance.

Symptoms and Progress of the Fever.

The *cold stage* varied in duration, from one to six hours, with a small and frequent pulse. In general there was excessive pain in the head, back and loins. The respiration was laborious, with great oppression in the precordia. The *Hot stage* brought out high toned inflammatory symptoms. It was attended with burning heat over the whole surface, but especially the epigastric region. The pulse, retaining its frequency, became full and hard. The pains of the head and spine were greatly aggravated; but the sense of oppression in the precordia was diminished. The laborious respiration continued. The eyes acquired a heavy aspect; and the face a flush. The temporal arteries throbbed excessively. The limbs were affected with pain and lassitude. The

thirst was excessive. At an early period of the disease, the tongue became dry, rough, and discoloured. When the malady tended to a fatal termination, coma supervened, the præcordial oppression increased, the respiration became more difficult, the face swelled, the muscles became tremulous and even convulsed, the skin, in many cases, assumed a bright yellow colour, and the cold sweats, which preceded death, stained the shirts of a saffron colour.

In cases of a more favorable character, the paroxysms varied in their duration from 12 to 36 hours; when a gentle perspiration, attended with a mitigation of all the symptoms, would break out. The disease was not prone, however, to assume the intermitting type, and in most cases there was only a remission, and this frequently of short duration.

Treatment.

"In fevers," says Dr. Miner, "the physician who only employs a palliative treatment, resembles the temporising, nerveless politician, who endeavours to repel foreign aggression, by bribing the enemy or paying tribute; but he that combats disease by making an early and powerful impression, is the efficient general, who transfers the seat of war into the enemy's country." This decided plan of an 'early and powerful impression,' was pursued in Circleville and its vicinity, not only by myself, but by Drs. Gibson, Luckey, Noble, Webb, and Hill, all respectable physicians, and proved to be the only one on which we could rest with any degree of safety. The same plan was pursued by Drs. Hildreth, Cotton, German and myself, in the fever of 1822—3, at Marietta, an account of which was published by the first named gentleman, in the Philadelphia Journal. Dr. Regnier of Galliopolis, Dr. Johnson of McConnelsville, Dr. Appleck of Barnesville, and Dr. Ackly, a former student of mine, have all pursued, successfully, the same course.

When called to treat a patient labouring under this disease, I commenced with blood letting, unless he had been ill for several days. The quantity taken varied from one to three pints, and the effects were eminently beneficial. Immediately after the operation, I began the exhibition of

calomel, in *forty-grain-doses*, every eight hours, and continued it for two or three days, during which the contents of the biliary ducts and the bowels, were freely evacuated. The dose of calomel was then reduced to two grains and repeated every two or three hours, until ptyalism occurred. If too much purging resulted from this administration, which often happened, I combined opium with the medicine, in such quantities, as to restrain the discharges to one or two each day. In some cases, however, in which the calomel, either in small or large doses, failed to produce sufficient purging, I found castor oil highly beneficial. Thus blood-letting and calomel were the great means of cure. The former prepared the system for the latter. Neither could have succeeded alone. I saw no case of death after the occurrence of a salivation. As the loss of blood in most cases, brought the excitement of the system to the grade which favoured the action of the calomel; so, on the other hand, when the excitement was too low, it was raised by stimulants to the degree which was necessary to the effect of that medicine.

In cases attended with obstinate constipation, injections were useful. Ipecacuanha given so as to vomit, after venesection, proved serviceable in some cases; and diaphoretics were also beneficial, but their effects were temporary.

Throughout the hot stage, I directed a free application of cold water to the surface of the body generally, and observed it to be attended with the happiest effects. It seemed to facilitate the action of the calomel on the mouth.

Epispastics to the forehead and extremities, about the fifth day, or as soon as the mercurial action had taken place, were of great advantage. If applied before the ptyalism had commenced, they prevented or retarded its establishment. On this point I could not be mistaken. If resorted to after the salivation had become violent, they never failed to check it. Indeed so great was their power in this respect, that I found them a valuable resource in all cases where the mercurial action threatened to become excessive. In accordance with these facts, I have observed for several years, in other

diseases, that it is extremely difficult to salivate a patient, who is under the influence of blisters.*

When typhoid symptoms supervened, we resorted to stimulants, both diffusible and permanent. Among the latter, a decoction of equal parts of the bark of the *cornus florida*, or dog-wood, and the *prunus virginiana*, or wild cherry tree, rendered stimulating with whiskey, was attended with excellent effects.

The saline mixture (solution of pearlash in vinegar) was resorted to in some cases, but I am quite convinced, that from its being often prepared with an excess of alkali, it was in some instances highly injurious. I have even thought, that it sometimes eroded the mucous membrane of the stomach. Previously to the epidemic, in 1825, I saw it given to a patient, who discharged a considerable quantity of blood from the mouth immediately after swallowing it; and subsequently on taking calomel, he evacuated many fragments of flaky and membranous matter, resembling the mucous lining of the canal. In consequence of these effects, I seldom employed this mixture in the epidemic of 1828.

But the abuses of another medicine were much more dangerous. I allude to tartar emetic, which, as far as my observation extended, was always pernicious, in the fever under consideration. It seldom failed to excite in the stomach and bowels an ungovernable peristatic action which greatly exhausted the patient. Indeed, my previous experience with this medicine, had by no means prepossessed me in its favour. I had witnessed too many instances of it sinister operation not to doubt its safe and salutary effects. A fatal case of its abuse, fell under my notice in 1825. On the 3d of August, I was called in consultation with Dr. C. F. Perkins, to visit Miss H. G. labouring under the effects of a dose of tartar emetic, administered about four hours before. She lay speechless and senseless, except, to give evidence of excru-

*We take this opportunity to bear the testimony of our own experience, to the great efficacy of blisters, especially when applied to the back of the neck, in arresting the mucous, glandular and cellular inflammation of the mouth and throat, which sometimes occur under the administration of calomel. Editor

ciating pain in the abdominal region. The alvine discharges were frequent and involuntary. Her eyes were turned upwards, her mouth extended, and her countenance ghastly. The thorax heaved high, and at length spasms with great distortion of features supervened, a dreadful gasping for breath came on, and in 16 or 18 hours after the medicine was taken, she expired.

Opium was given liberally, and checked the alvine evacuations, but afforded no other relief. Diffusible stimuli, both internal and external, with blisters to the head and extremities produced no effect.

But to return to our epidemic. The plan of treatment which I have detailed, was, in my own practice, so eminently successful, that I lost but one patient, and he expired the next day after I was called to see him, the 12th of his illness.

Sequelæ.

The disease was succeeded by Jaundice, which affected a great number, and yielded to the ordinary remedies. Many cases of ague likewise followed, and assumed, generally, a quartan type—in one person the quintan. They were cured by the following method. I first bled to the extent of one or two pints; then administered a large dose of sulphate of magnesia, or calomel and jalap; after which I gave twelve drops of Fowler's solution of the arseniate of potash, five times a day, until the disease was removed, or the face began to swell. In some cases it was necessary to repeat the blood letting and purging, and to vary the dose of the solution. This plan did not fail in a single case.

Non-Contagion.

When the disease was extremely prevalent along the canal, I had several persons, severely ill, brought into Circleville, at that time quite healthy, and not one of them communicated the disease to those about them;—a sufficient evidence that it was not contagious.

Circleville, Ohio, January 1829.

ART. III.—*Notes of case of Gutta Serena of the right eye, from the pressure of a tumour on the optic nerve,* By JEDEDIAH COBB, M. D. *Professor of Anatomy, in the Medical College of Ohio.*

Mr. H———, from Baltimore, consulted me for an affection of his right eye. He stated, that being on a fishing excursion up Chesapeake Bay, in the month of August 1825, he was suddenly seized, whilst exposed to the rays of a hot sun, with an acute pain in the bottom of the orbit of the right eye, shooting far back into the head. The pain continued, without abatement, until he obtained medical aid on his return to Baltimore. The plan of treatment, as near as I could ascertain, was strictly antiphlogistic. As the pain decreased, the sight of the affected eye gradually diminished, until it was completely lost. When I saw him in this place, two years afterwards, the eye presented the appearance of a well marked case of gutta serena, the pupil was greatly dilated and irregular in shape. The iris, when exposed to the strongest light, did not contract. The general aspect of the eye was peculiar, and its natural lustre and intelligence lost. I told him I could do nothing with any prospect of success, for the restoration of his sight, and I believe nothing was done. About three weeks after consulting me, he was violently attacked with arachnitis, of which he eventually died, when leave was obtained to examine the body.

MORBID APPEARANCES.

On opening the cranium, the arachnoid membrane exhibited traces of extensive inflammation, being covered with coagulable lymph and serum, over its whole extent. The ventricles were much distended with serum. Whilst removing successive portions of the cerebrum, the scalpel at length struck against a hard substance, which, upon careful examination, was found to be a tumour, something larger than a nutmeg, and of a spheroidal shape. It lay directly in the course of the optic nerve of the right side, posterior to its junction with its fellow. The nerve was completely obliterated by its pressure. The tumour was composed of calcareous mat-

ter enclosed in a cyst resembling the coats of the arteries. The cyst was attached to the carotid artery, and probably resulted from a diseased action in its integuments.

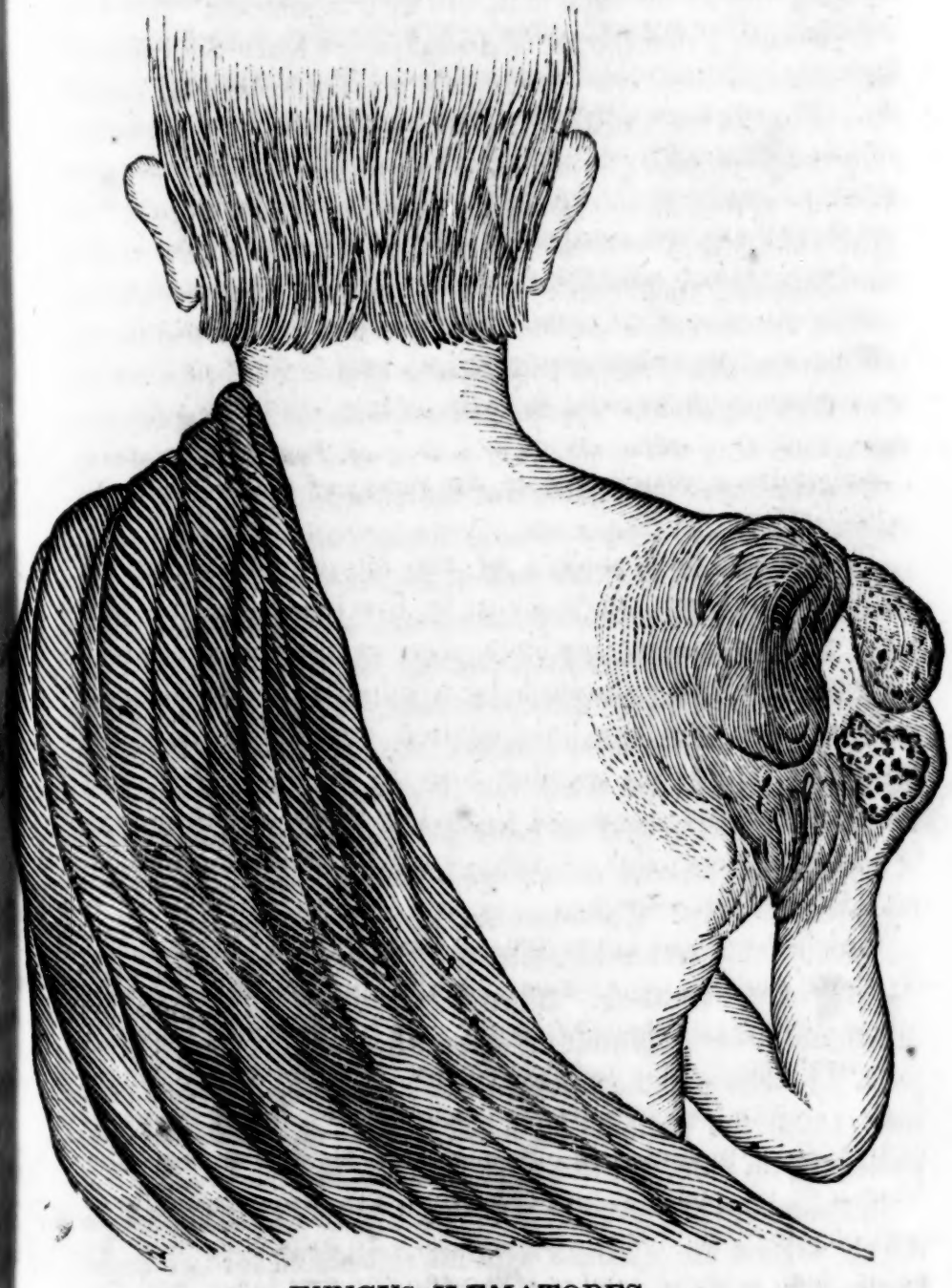
Remarks: From the above dissection we learn the cause of the blindness, and how utterly ineffectual all remedial agents must prove, in certain cases of gutta serena. We may likewise draw the important physiological conclusion, that the fibres of the optic nerves do not decussate each other, as is thought by many anatomists.

Cincinnati, May 1829.

Art. IV.—*Diagnostic notices of a case of Fungus Hæmatodes; designed as a contribution to the history of that disease.* By the Editor.

The unfortunate subject of the following case, on the 20th of this month, made a visit to Cincinnati, for the purpose of becoming my patient. During his stay of a week, he was seen and examined by a number of my medical friends, most of whom have advised the publication of the history of his disease, together with the annexed drawing of the tumour made by one of them, Dr. Warren. From the rare occurrence of this terrible malady, I have thought proper to follow their advice.

Whether Fungus Hæmatodes is more frequent in one country than another, or is connected with any particular condition of society, I am unable to say. In the Western States it is so uncommon, that most physicians have not seen a single case. Before that now under consideration, I had never, in nearly 30 years, met with but one case. It was in a young woman of the country, and existed on the upper and inner part of one of the lower extremities, with attachments to the pubic and ischiatic bones. The tumour was large and conoidal. She was advised to have nothing attempted except for palliation; her mind ran, however, upon an operation; and she found three physicians willing to undertake it. Uniting in the enterprise, they wielded the scalpel by turns, and continued their slicing until she expired. But let us resume the history of the other case.



FUNGUS HÆMATODES.

Mr. John Anderson, of Kenhawa county, Virginia, aged 46 years, is the person whose disease, I am about to describe. By occupation Mr. A. is a carpenter, but has not worked at his trade for 10 or 12 years. He is now much reduced in flesh, though some time since was athletic, and weighed 220 lbs. He has been a hearty eater of meat, but not an intemperate drinker. None of his family ever had Fungus Hæmatodes.

About eight years ago, by accidentally putting his hand over his right shoulder, he discovered a small hard tumour, behind the acromion process of the scapula. It was beneath the skin, but attached to that covering, and nearly immoveable. Its colour was livid. It was not painful, nor even tender to the touch.

For several years it grew but little, and gave him no inconvenience or concern, his general health continuing good. At length, in the spring of the year 1828, it became affected with occasional darting pains, and was found to have attained, at its base, the size of the palm of the hand, with a thickness or elevation of nearly an inch. Becoming alarmed, he applied to an 'Indian doctor' who scarified the surface of the tumour with a razor, and sprinkled over it a powder called 'wet fire,' which, in the course of an hour gave him excruciating pain. A poultice of roasted onions was then applied, and renewed for several days. Considerable sloughing was the consequence of this treatment, with a corresponding reduction in the size of the swelling. The next application by the same individual, was an extract of several herbs, which gave some pain. In a month the ulcer cicatrized. During the summer (1828) the patient's general health was good; he experienced no pain, and the tumour did not grow.

In the month of November, while digging a well, he imprudently turned the windlass with his right hand for two days. By the first night the tumour felt sore and painful; the second it was still worse; and on the morning of the third day, it felt so bad that he desisted. From this time forward it grew rapidly and was much more painful.

Through the ensuing winter it constantly grew worse; paining him both day and night; but more at night, and most when in bed; so that he could not, on an average, lie down more than one third of the usual time. Exposure to cold likewise increased the pain, while heat gave great relief; so that he was induced to rise every night and expose it for hours together, to the action of a hot fire. Even when subjected to the air, in the month of March, during our examinations of it, the pain would increase, and could only be relieved by drawing close to the fire, Throughout this period, however, his general health did not fail in any material degree; he had, according to his own account, no fever; his appetite was good; and his bowels regular, and yet he lost considerable flesh.

Early in February, he again had recourse to the 'Indian doctor,' who directed mercurial ointment, and a poultice of mush (Indian corn meal and boiling water) with some kind of powdered black seeds, which was continued for several weeks, and seemed to mitigate the pain. About the middle of the month, however, a fungus shot out near the lower part of the tumour and continued to grow. In this state of things, he inadvertantly pulled himself up in bed, with his right hand, which hurt him very much, and the next morning the fungus discharged about half a pint of blood; from which time forward, the tumour was affected with greater pain and soreness; and grew more rapidly. The pain was generally dull, but occasionally acute and darting, and it sometimes extended down the humerus. Meanwhile he suffered a rapid emaciation, and about the end of February his feet and legs began to swell.

When he visited Cincinnati, the tumour was of such dimensions, that it required a string twelve inches long to pass over it, from one side of the base to the other; but it was deeply cleft through the centre into two lobes or tuberous masses, the larger lying towards the spine; and between them was a considerable area of ulcerated surface, covered with offensive pus, and a fungus of the size of a hen's egg.—The most projecting of the rounded summits, was about three

inches high. In some parts the surface was covered with hard, semi transparent tubercles, of various sizes, which discharged no fluid when they were punctured. Its colour was not unlike that of a ripe mulberry. Most parts of the tumour had a spongy feel, but towards the processus acromion, it was of a cartilaginous hardness. On every side the morbid structure graduated into the sound. The induration and discolouration extended downwards and forwards, quite into the axilla, the glands of which were evidently involved in the diseased structure.

His complexion was sallow; countenance anxious; tongue not particularly foul; pulse habitually frequent; abdomen as well as his feet and legs swollen; respiration difficult, especially in ascending an eminence; and the affected side œdematous. Under percussion this side every where, except over its highest parts, emitted a dull and inelastic sound; and, on resorting to the stethoscope, the respiratory murmur was found to be entirely absent below a horizontal line passing through the upper part of the axilla. The left side sounded well, and the respiratory crepitus was audible throughout. He could only lie on his back. The arm of the affected side was much reduced in size.

The back part of the left shoulder, and the left leg, had a small, subcutaneous tumour, adhering to the skin, which had assumed a livid colour. They were discovered three years before, and appeared to be of the same kind with that on his right shoulder, when it first attracted his attention.—It gave him no pain to press upon or handle them. Had not the first of the group developed itself with the characters of fungus hæmatodes, they might be regarded as cancerous.

In referring to the history of this case we find, first, that the disease occurred in a healthy subject without any obvious cause; secondly, that the tumour cicatrized after the integuments had been ulcerated by escharotics; thirdly, that muscular exertion of the arm and shoulder of the affected side, had a manifest influence, in accelerating the growth and dis-

ordering the sensibilities of the part; fourthly, that cold was prejudicial, and external heat palliative.

What were the resources of the profession in this case? The extent of the tumour; the degeneracy of the integuments; the morbid state of the parts in the axilla; the simultaneous existence of other small tumours of the same kind; and the state of the patient's health, in the opinion of all the gentlemen who saw him, rendered a resort to the knife hopeless. To promote absorption from the chest, abdomen and lower extremities, he was advised to use the pil. hydrargyri, and the compound powder of jalap. But his anxieties called for something more; and I was induced to recommend an ointment of the hydriodate of potash, around and upon the base of the swelling, with the internal use of the tincture of iodine by day, and laudanum at night. Others might have preferred to do nothing. But has not iodine set aside both the strumous and the goitrous action, and why might it not supersede, the morbid action in fungus hæmatodes? Who could have *foretold* that scrophula and goitre would disappear before the influence of iodine, or syphilis yield to the action of mercury? In each of these maladies, there is a specific morbid action, with which the effects of their respective remedies, are incompatible, and why should we decree, that the morbid action in fungus hæmatodes can be superseded by no agent in nature? If any one mode of diseased existence, exhibiting specific symptoms, can be cured, by substituting the action of a particular agent, why may not other modes be superseded by other agents? He who does not see a relation of *incompatibility* between syphilis and mercury; small pox and the cow pock; and intermitting fever and arsenic or the sulphate of quina, seems to me to look at the subject with prejudice.

It signifies nothing in the argument, that we employ other means at the same time—means calculated to reduce or exalt the powers of the system, or to correct certain functions, sympathetically disturbed,—unless it can be shown, that *these* means are adequate to the cure. It would be absurd to administer the sulphate of quina in a case of intermittent,

attended with a *high* phlogistic diatheses. That condition must first be *reduced*, by blood letting or other sedatives, but all the world knows, that this would not be the *cure* of the malady. That is effected by the Bark, or arsenic, or some other irritant, which substitutes its own irritation for the febrile. This principle of substitution, is more operative in the practice of medicine than many suppose. There are even few acute diseases, which yield to mere depletion; they generally require a superseding agent of some kind, to arrest their progress.

Of course in prescribing iodine in a case of fungus hæmatodes, it should not be done with any definite expectation of a cure. Such an event is only possible: It may come from that medicine, or from some other, or perhaps from none. Because some diseases can be cured, by the operation of certain irritants, it by no means follows, that there are remedies of that class for all. But still, we know not in this respect the limits of our *therapeutia*, and can only reach them by experimental efforts

Cincinnati, March, 1829.

ART. 5.—*History of a case of Verminous Disease.* By BENJAMIN S. BROWN, M. D. *of Logan County, Ohio.*

On Sunday evening, the 29th of March, 1829, I was called to see the infant son of Mr. I. C. aged about 4 years. I was informed by the parents, that it had been suddenly attacked a day or two previous, with severe griping pains of the bowels, resembling spasmodic colic; that its agony was very soon so great, that they apprehened it would go into fits; that they gave it a tea-spoon-ful of spirit of turpentine, which afforded almost instantaneous relief; that after a short time they administered a dose of castor oil, which produced a few motions from its bowels, and brought away a few worms, (*lumbricoides.*) Upon examination, I found the abdomen much tumefied and very tender on pressure; several hard lumps or knots, could be distinctly felt in many parts, particularly along the course

of the arch of the colon, and near the umbilicus; which regions especially were sore and painful on pressure. The pulse was about 60 in a minute, quick, somewhat depressed, but regular. The tongue had rather a white, smooth, slimy appearance; breath of a peculiar, disagreeable odour; the breathing was nearly natural; had no appetite since taking the castor oil, though I was told it had been very voracious for some months before, causing it to eat as much as was usual for two or three children of its age. The complexion was pale and sallow, with an anxious unmeaning expression of countenance; the lips appeared to be swelled, particularly the upper one.

It being late in the evening, I gave a portion of calomel, about 8 grains, combined with a carminative. On the morning of the 30th, no operation of the calomel having taking place, I made a decoction of spigelia and senna, and directed them to give it at short intervals, so that he should take it all by the middle of the day, at which time, if it should not have operated *freely*, to give another portion of calomel, combined with jalap, and afterwards to give a small dose of castor oil, every two hours, till it *did operate*.

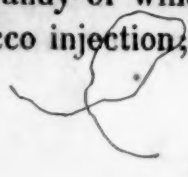
On Tuesday, 31st, again visited my patient. Had taken all the medicine, without its producing any operation; found him very restless and uneasy; the tumefaction of the abdomen was rather greater than before; complained of much griping pain; started and moaned in his sleep; in short all the symptoms were rather aggravated. I made use of a strong solution of sulphate of soda, in a decoction of senna, as an enema, throwing up between half a pint and a pint at a time; this was discharged in about half an hour after each administration, without producing any other evacuation, than a few worms, with what was thrown up. I directed a small portion of calomel, scammony, and jalap, to be given three or four times in the day, combined with a carminative, to prevent the griping, as well as its rejection by vomiting; the enemata were to be continued at intervals of three or four hours, and warm emollient fomentations applied to the abdomen.

Wednesday, 1st April. No evacuation, and what was

thrown in by injection remained much longer than heretofore. The patient was evidently worse, was much debilitated, with great anxiety of countenance. The breathing was hurried and laborious; pulse frequent, small and feeble; tongue white, dry, and sticky; breath extremely fetid; and the tumefaction and soreness of the abdomen much increased. I directed the enemata to be continued, with an addition of ten or twelve grains of tartarized antimony, to each portion thrown up; a powder composed of 4 grs. of calomel, 4 of scammony, and 5 of jalap, to be given every two hours until eight were taken; then to give a small portion of castor oil at the same intervals, and, besides, to drink of a decoction of spigelia and senna, through the day. A large blister was laid over the front part of the abdomen, in order to allay, as much as possible, the irritation within, and to prevent the inflammation which, from the extreme soreness, I feared might take place.

Thursday, April 2d. Not much alteration since yesterday. The blister had drawn well, and he had been more composed, had slept quietly for several hours, as soon as the blister had drawn. The enemata had no better effect than before. I directed the same course to be continued, the same number of the cathartic powders to be given, as yesterday, and the castor oil afterwards. Increased the quantity of tartarized antimony in each injection to 15 or eighteen grains, and the patient to be put in the warm bath two or three times in the course of the day.

Friday, 3d. No alteration except for the worse. The injections, notwithstanding the increased quantity of tart. ant. had remained much longer than heretofore; they would occasionally bring away a worm or two, without producing any other cathartic effect. The little patient appeared to be fast sinking into the arms of death; a very feeble and frequent pulse, listlessness and insensibility, great debility, tongue moist, white, and slimy, considerably comatose, distension of the abdomen about the same, but the soreness was less than before the blister was applied. I directed a pretty free use of brandy or wine, mixed with water. Made a trial of the tobacco injection; it was discharged immediately, without



bringing away any thing more than was thrown up. I began to despair of effecting any thing by the use of injections, or, indeed, of strong cathartic medicines, as there had already been so much taken without producing any evacuation. I however directed the warm bath, and in consequence of his debility, I had it applied by means of a blanket wrung out of hot water; the patient being stripped and wrapped in it, as warm as he could conveniently bear it. I also advised a pretty free use of wine and water, and a small dose of castor oil to be taken every two, three, or four hours.

Saturday, 4th. I was much gratified on visiting my patient, to find that the medicine had began to operate. The first motion from its bowels brought away a convoluted knot or roll of worms, which consisted of seventy in number, mixed with a large quantity of dark coloured, slimy, feculent matter, of a very disagreeable fetid odour. The medicine continued to operate throughout the day, and, indeed, for several days. The stools were pretty much of the same nature, and mixed with the same kind of worms, viz. *lumbricoides*, from four to eight or nine inches in length. They were nearly or quite all dead, and many of them pretty far advanced towards a state of putrefaction, indicating that they had been dead for several days. The number discharged was so great, as to induce the parents to count them. In the three first days, the number discharged was about four hundred, and during the week five hundred and fifty-two, all of the above size.

Almost as soon as the medicine operated, the child had a good appetite, which it was found necessary rather to restrain than encourage. It advanced rapidly in strength, and was in a short time restored to its former health and spirits.

On reflection upon the case, I am led to the conclusion, that a principal reason of the obstinate constipation, was merely a mechanical obstruction of the intestines, by the knots or rolls of worms which they contained; for as soon as the first large roll was discharged, (which was of itself quite sufficient, completely to obstruct any part of the alimentary canal,) the cathartic effect of the medicine appeared to go on very naturally. The indurations, which could be felt in the

abdomen along the course of the colon, I have no doubt were of this nature, from the circumstance of their frequently changing their positions, and entirely disappearing immediately on the operation of the cathartic medicine.

The whole amount of medicine which the patient took during the week, before it operated, was about 100 grs. calomel, 75 of scammony, 75 of jalap, and 2 pints of decoction of spigelia and senna, besides a large quantity of oil and epsom salts, given by the mouth, and an incredible quantity of senna, salts, and tartarized antimony by injections.

June, 1829.

ART. 6.—MEDICAL JURISPRUDENCE.—*Report of a trial for Murder, in which the culprit was defended on the ground of his labouring under Mania a potu, or Delirium from Intemperance.* By the EDITOR.

James Birdsell, of the village of Harrison, in the western part of this county, on the 3d inst. was arraigned before the Supreme Court of Ohio, for homocide. Present on the bench, Judges Pease and Sherman. In the indictment it was laid, that the defendant, on Thursday evening, 5th of March, 1829, murdered his wife, by cutting through her neck from side to side, with a narrow axe, at a single blow, which severed the spinal column, and caused instant death. The proof of the fact was perfect and uncontroverted. The defence set up was *Mania a potu.* Having recorded the principal facts, and also been furnished with the notes of the prosecutor and one of the advocates, I propose to lay before the reader such portions of them, as have a relation to the subject of *Medical Jurisprudence.*

The defendant was to appearance about fifty years of age, and had been married nineteen or twenty years to a second wife, by whom he had several children, one of whom was a witness in the case. It appeared from the testimony, that for several years he had been subject to occasional fits of intoxication, which in the latter part of the time had been followed by *Mania a potu*, which generally lasted for several days,

and went off spontaneously. In these paroxysms he had the physical and moral symptoms which usually characterize that malady. The former were, great tremors of the hands, a pale face, red eyes, and sometimes a copious perspiration even when exposed half naked to a cold atmosphere. The moral phenomena were, disordered perceptions of sight and hearing, so that he often insisted, that he saw himself surrounded by snakes and other reptiles, or by armed men who sought to kill him; or supposed he heard strange sounds of trumpets, or vocal music, or conversation of which he was the subject, and the object of which was mischief to himself. He was thus filled with apprehension for his safety, and sometimes ran about the village at night, as if attempting to escape from bad persons who were pursuing him. On a certain night, he made so much clamour as to excite the idea of several men engaged in a riot. At another time, in his own house, he concealed himself between the feather and the straw bed, where he was almost suffocated. On another occasion, he was found, after dark, standing in the street without shoes or hat, and had described around him a circle in the dust, and declared, that if any one entered it, that person would kill him. At other times he would peep from his window, and point his gun, as for defence, against imaginary persons, who were approaching to seize him. Again, he would fancy that two armies were engaged in battle, and that he must join one of them. In all his paroxysms he had so great a degree of watchfulness, as to sleep little or none for several nights in succession. But his prevailing maniacal conception was, that his wife was in a combination with three of his neighbours, one of whom was his son by a former wife, and that they had conspired against his life. Of these men, when they were not in his presence, he was afraid. In the paroxysms he was accustomed to charge his wife (unfoundedly in the opinion of witnesses) with a criminal intimacy with these persons. He even threatened to kill her if she did not desist, and had been heard to utter this threat, when he was thought by one of the witnesses to be rational.

On the Sunday before the murder, he drank freely, and

was intoxicated, in which condition, as usual, he was quiet, dull, and disposed to lie in bed. Monday, Tuesday, and Wednesday presented nothing special. On Wednesday evening he complained to a neighbour of feeling unwell, and asked his son's assistance in the performance of some necessary manual labour for his family. He seemed to the witness to be rational. During the night he slept none, and complained of cramp in his stomach. The next morning his family thought him crazy, but were not alarmed, as they were accustomed to such attacks. In the course of the day, he took an axe on the shoulder, and walked rapidly to the house of a neighbour, whom he desired to go home with him, saying they wanted to kill him; and about the same time he told another of the supposed conspirators, that he had overheard his wife and him that morning whispering about taking his (the witness') life.

He spent the day at home in the midst of his family, apparently in agitation and terror, but said he would not hurt any one, and did not wish to be hurt. In addition to the axe, which he placed under the bed, where it was often kept, he provided a scythe, which he brought into the house. He manifested jealousy of his wife, and told her to act better, for she had already caused the death of 30,000 men. He fancied that the persons of whom he was jealous, were in the loft manufacturing ropes to hang him, and going up, returned and said he had cut the ropes to pieces, and brought down the fragments with him, though he had nothing in his hands. In the course of the afternoon, he fastened both the doors of his house. At the usual time his wife went out to milk, and he barred the door after her. On her return he fastened it again. She was seated near the fire, and he was walking the room. At length he took the axe from under the bed, and suddenly gave the fatal blow, following it up with two others on the face. His oldest daughter caught the instrument, which he yielded up, and then seized the scythe, with which he attempted to strike her. She defended herself with a chair, till the smaller children having opened the door, she made her escape. He took his youngest child in his arms, and sat down by the window. The child exclaimed, 'mamma bleeds!' which he said made him feel bad. When his neigh-

bours arrived immediately afterwards, he gave himself up, acknowledged what he had done, said he knew he would be hung for it, but that he ought to have done it nine months sooner; and that if he had it to do again, he would strike two blows where he only struck one. Talked so rationally, that many of the witnesses could not believe him deranged. Evinced no dread of punishment for his crime, but was still in great apprehension from the persons who, he had believed, intended to kill him. Was glad that he had defeated their calculations. On his way to the city to be committed to jail, talked rationally and composedly about his affairs, and on various subjects; but frequently asked the guard if they did not hear sweet sounds of different kinds, and on being answered in the negative, insisted that he could not be mistaken. After being committed he became regular, and expressed his regret at what he had done.

Three medical gentlemen were required to deliver professional opinions on the testimony. They came to the same conclusion, which was, that the defendant was subject to *Mania a potu*, and that he laboured under that malady when he perpetrated the homicide.

On this opinion, and the facts which support it, the counsel for the prisoner rested his defence. It was alledged, that *Mania a potu* should not be confounded with the delirium of a fit of intoxication; but associated with insanity, and, like it, might be offered as a legal excuse for the perpetration of what, in its nature, is felonious. They admitted, that drunkenness cannot be plead as an apology for crimes, but argued, that when it gives birth to insanity, the maniac should experience all the immunities of a *non compos* from any other cause. They averred, that if a man, in the commission of a felonious deed, should receive a blow on his head, which was followed by mental alienation, his acts, during that state, would not be regarded as criminal; and that the subject of *Mania a potu* is in that condition; lastly, that the habitual drunkard is urged on by a physical necessity which he cannot resist; and should not, therefore, be held accountable for his conduct when labouring under the derangement, which follows his inebriation.

To which the prosecutor replied, that *Mania a potu* should be referred to drunkenness rather than insanity; that it follows as the necessary consequence of the former, and soon abates; that the defendant, Birdsell, was aware that his intoxication was productive of delirium, and, hence, that he *voluntarily* did what he knew would derange his intellect; that *Mania a potu* being a natural effect of intemperance, cannot be offered as an excuse, like the insanity which might follow a blow on the head, received during the perpetration of a felony; which blow and insanity should be regarded as mere contingent or accidental events; finally, that the law does not recognise, in the drunkard, a *physical necessity* to drink; but holds him accountable for his actions when intoxicated; and, of course, in the delirium which follows that intoxication.

The opinion of the court was looked for with anxiety; but in their charge, they waived a discussion of the point in controversy, and submitted it, with the facts, to the jury, who returned a verdict of murder in the first degree, as laid in the indictment.

It is certainly a matter for regret, that the highest tribunal of the state, should not have delivered an opinion on the law in this case. The question was presented to them detached and unincumbered. A more favourable opportunity cannot again occur. From the prevalence of *Mania a potu*, it is most desirable, that its character in relation to our criminal code, should be ascertained. If the Court could not say what the law is, they might have said what it ought to be. One step, on ground which must sooner or later be travelled over, would thus have been taken, and that, too, by jurists of acknowledged ability.

Till within the last twenty years, *Mania a potu* had received but little attention as a subject of practical medicine; and, in reference to medical Jurisprudence, it had attracted still less. In his able treatise on insanity according to the laws of

England, Dr. Haslam evinces, that even he has ideas on this subject not altogether correct. In a note he uses the following language:—

A broad distinction should be made between the immediate and remote effects of intoxication. A man is not held guiltless who perpetrates a crime during the state of intoxication. He *voluntarily* introduces into his system a stimulus which augments his ferocity, diminishes his moral affections, and overshadows his reason. But the usual effects of this stimulus is temporary, he awakes from his debauch, rational, and commonly drags after him the heavy chain of reflection. It is however equally true that this single excess may be continued into permanent insanity: he may remain for many months in a state of mental derangement, and during the prevalence of his disorder may be compelled to forego all intoxicating beverage.—If such person after the lapse of several weeks from the commencement of his disorder, should, under its influence, commit a fatal outrage, no system of jurisprudence would connect the violence with the cause which originally produced the disease.

Cooper's Tracts on Med. Jurispr. p. 317.

Now I am inclined to think, that *Mania a potu* is never *continued* into permanent insanity, except the individual be *predisposed* to that malady, when it may be excited by various causes, both moral and physical, and among others by intemperance; but this is not *Mania a potu.* That malady is always transient—often continuing for two or three days, only, and seldom extending beyond a fortnight. Like mania, and melancholy or monomania, it exhibits, in different cases, every degree of hallucination, from the perception of a single imaginary object, up to throngs so complicated and fantastical, as to absorb the whole attention and controul all the actions of the individual. Some patients are quite conscious that the whole is unreal; but in others the belief in the reality of their disordered conceptions is of the firmest kind. The power of combining these conceptions, is sometimes wanting: at other times they are connected like the ideas of the monomaniac, and the individual exhibits a fixed purpose with associated ways and means for its accomplishment. Now the question is, whether during a paroxysm of this kind, the individual, in proportion to the degree of his alienation, should be held exempt from the penalties of the criminal law?

On this question jurists, physicians and moralists are divided. They all agree, however, that if *Mania a potu* should continue for months, or even weeks, the individual would be irresponsible. But it might be asked why more irresponsible at the end of many weeks, than at the beginning of the first? If two drunkards should be seized with *Mania a potu*, at the same time, and on the first day, one of them should perpetrate a felony, and the other do the same at the end of thirty or sixty days, on what principle of justice, should the former be punished and the latter pardoned? His more protracted delirium might even be regarded, as *prima facie* evidence of greater intemperance, and consequently of greater depravity; for the criminality of the acts of a person affected with *Mania a potu*, can only be deduced from the criminality of its remote cause—drunkenness. Tested by a reference to the origin, nature and consequences of their delusion, the two individuals present an exact identity. They differ only as to the stage of the delirium in which they commit their respective felonies. But a difference in *time*, like a difference in *degree*, does not constitute a difference in *kind;* and what is criminal in one, cannot be innocent in the other. No jurist or legislator could venture to assert, that because, in one case, the crime was committed sooner after the intoxication than in the other, it was, *therefore*, more felonious. In both cases, the intoxication has ceased. A new and distinct delirium has arisen; which affecting both individuals alike, renders them alike irresponsible to the law, or leaves them equally subject to its penalties. It is to be regretted that so many persons confound drunkenness with its consequence, *Mania a potu*. All who do this, are liable to fall into the absurdity, of holding the maniac more accountable on the first, than the last days of his insanity; when, throughout the whole period, his actions should be brought to the same standard, unless it can be shown by testimony, that his delusion has increased or diminished.

But let us recur to the question, whether *Mania a potu*, either temporary or protracted, should destroy accountability to the criminal law? If the subject of this malady be held respon-

sible, it must be either, because his delusion, originating remotely in a viscious habit, partakes of that character; or, because it does not destroy the perception of right and wrong.

First. Those who believe that *protracted Mania a potu* should render the individual irresponsible to the law, must as I have shown, regard him as exempt from its penalties from the beginning; and as a great majority, in society, are probably of that belief, we might presume that the question is already decided in favor of the maniac from drunkenness. There are not a few, however, who, on being presented with the alternative of punishing or excusing, *all* his maniacal outrages, consider it just and necessary to adopt the former.—Regarding intemperance as voluntary and criminal, and considering *Mania a potu* as its legitimate effect, they would apply the same law equally to every part of the drunkard's conduct, from the commencement of his fit of intoxication, down to the utter overthrow of social feeling, moral principle, and sound intellect, which characterize his mental alienation. The cause of temperance and the safety of society, say they, alike demand this severity. It will deter others from drunkenness, and of course protect society, by anticipation, from the enormities which follow in the train of that vice. If it would, indeed, work out this salutary effect, we might be justifiable in punishing *non compos*, for the crimes which he unconsciously commits. But I cannot bring myself to believe, that this desirable end can be thus attained.—Few men, perhaps none, when presented with the prevailing temptations to drunkenness, are likely to anticipate consequences so remote, or contemplating, will be deterred by them. I even doubt, whether the known responsibility of the drunkard to the criminal and civil law, for all his conduct during a fit of intoxication, contributes in any great degree, to repress intemperance. Its chief influence, seems to me to consist in preventing bad men from real or simulated intoxication, as an excuse for the crimes which they desire to perpetrate. In this lies the wisdom of the law, and the necessity for its existence.

Drunkenness in all its effects—present and prospective—is a terrific moral evil, which every man should labor to suppress. But we must work with other instruments than the halter and the gallows. No criminal code ever succeeded by its cruelty. To cut off dangerous men from society is comparatively easy: to prevent their reproduction is the task. A bad government limits itself to the former, but a good one seeks to accomplish the latter. Its great object is reform, which it effects by education—by removing temptation—by restraints and disabilities—by certain but mild penalties. Its eye is sleepless, but never ferocious. It feels no malice, indulges in no revenge, and delights not in the sufferings which it inflicts. Its chastisements are tempered with mercy, and its decrees of death not written in blood but the milk of human kindness.

It is notorious that many good men fall into habits of intemperance. The insiduous influence of example, inordinate appetites, bad health, disasters in business, domestic misfortunes, or private griefs, decoy or jostle them from the long trodden paths of sobriety, to which many of them never return. Suppose a man of this class—one for example who had experienced some great misfortune in trade—to become at length the subject of *Mania a potu*, and murder his wife—the woman whose participation in his misfortunes had armed them with the stings of scorpions, and led him to seek relief in the use of ardent spirits;—should *such* a man be ranked with criminals and condemned to death?—inflicting on his innocent orphans a new and more terrible anguish—on their very name a disgrace which all their tears could not wash away? This may be called a strong case, but it tests the principle. If one man is punishable for his actions when laboring under *Mania a potu*, all others are equally obnoxious, as the law should not go back to the causes of intemperance, and measure out its punishments according to their relative crimininality.

We come, in the second place, to inquire whether the delirium in *Mania a potu*, is of that *kind* which should secure the individual from the penalties of the law.

The recorded cases of this disease, together with those which I have seen, leave little doubt in my mind, that this question ought to be answered in the affirmative. Like the other forms of mental alienation it occurs with some diversity in its symptoms, and with much variety in its degrees. Now, there are two principles of judicial restriction, which are applicable to all kinds of insanity. First. They entitle *non compos* to immunity from punishment but in proportion to their degree. Therefore when his morbid conceptions are not very vivid, and his power of judging is but little impaired, his claims on the clemency of the law are weaker, than when his malady is more intense. Secondly. When he is deranged on one subject only, his insanity cannot be given in excuse for acts which are foreign to that subject.

Hence it does not follow as a matter of course that mental alienation will justify every felony. It must be shown, either that the culprit is insane on all subjects, to such a degree as to pervert his affections and destroy his estimate of right and wrong; or that his crime had some natural connexion with the subject of his hallucination. *Submitting to these requirements*, the subjects of *Mania a potu* seem fairly entitled to plead their alienation, when arraigned for crimes. As I have already said, they have disordered conceptions, of intense and bewildering vividness, which, it is true, they sometimes regard as delusions, but oftener mistake for realities, and act accordingly. Their passions, particularly those of fear, jealousy and anger, have an uncontrollable mobility; their desires and aversions are equally morbid, and their will displays a wild and sleepless energy of action. In this condition, they may still distinguish between right and wrong, on many subjects, provided their attention can be fixed, and the subjects have no connexion with the trains of thought with which they are incessantly occupied; but in reference to these, they judge and act on the conviction of their reality; that is, with, a firm belief, and should not, therefore, be held accountable. Thus in the case of Birdsell, the predominant opinion, in all his paroxysms, was, that two of his neighbours, and his own son, had conspired against his life; and would, after they had

killed him, unite themselves with his wife, whom he also considered in the conspiracy. Under this delusion he killed her, determined, as he said, 'to defeat their calculations.'

Notwithstanding this dreadful catastrophe, it cannot be said on the whole, that *Mania a potu* is one of the most dangerous forms of mental alienation, especially in old inebriates, whose constitutions are broken down. Most of them are cowards, and far more disposed to flee from danger, either real or imaginary, than to face it. Indeed, terror is, in some degree, the characteristic of this form of insanity, and has shown itself in many striking and ridiculous modes of action; but fear is not incompatible with the perpetration of outrages, when *non compos* thinks he can strike a blow, which may lessen the danger that he believes to surround him.

But should society interfere with the subjects of *Mania a potu?* when that malady in general lasts but a few days, when in many cases the patient is ill, and in others the delirium would pass off before any complicated system of measures could be executed? I answer yes; for in that brief period, acts the most horrible may, possibly, be perpetrated; and on this possibility, rests the duty of our interposition.

Ought writs of *lunatico inquirendo*, under the existing statute, be sued out against persons in this condition? This would certainly be preferable to suffering them to go at large; but the regulations for protracted or permanent insanity, do not seem to be well adapted to a temporary delirium, and are not likely to be enforced.

I am of opinion, that the case calls for special legislation; but shall not presume to insist on the mode, in which the power of the state should be exerted.

In regard to drunkenness itself, our laws require to be revised and extended. If the drunkard be allowed his personal liberty, he ought to be subjected to several restrictions and disabilities, such as excluding him from juries, and from all civil offices; diminishing his credibility as a witness; depriving him of the elective franchise; and consigning his property to trustees. By these measures, not at all inconsistent with the genius of a mild and beneficent system of jurispru-

dence, much might be accomplished in the prevention of drunkenness, and, consequently, of *Mania a potu*. Whenever that complaint might occur, however, the individual should be apprehended and confined, not at the discretion of friends, but in obedience to a law that should admit of no exceptions; and at the same time (if his property had not been previously subjected to trustees) that step should be taken. The disgrace and mortification attendant on such a proceeding, would do more to deter men from intemperance, than a multitude of public executions; while it would protect families and the community from the outrages which it is the object of the present system to punish, rather than prevent.

Since the above was sent to the press, a motion for a new trial has been argued. Harrison and Drake for the prisoner—Wade for the commonwealth. The Court, having deliberated on the application, refused to interfere with the verdict of the jury. I had not the advantage of being present when their opinion was delivered, but understand that they said, that the question whether Birdsell, at the time when he murdered his wife, had the power of discriminating between right and wrong, was one of fact, to be made out by evidence, and properly within the province of the jury. The decision having been made by that tribunal, they felt no disposition, nor did they see any good reason, for disturbing the verdict.

Upon the question, whether *Mania a potu* could, under any circumstances, be given as an excuse for the commission of a crime, they were not called upon, in the present case, to decide. They, however, felt no unwillingness to express their opinion, that if the insanity was the offspring of intemperance, and the prisoner *knew* that intoxication would produce it, he could not plead it as an apology. I have endeavoured, unsuccessfully, to learn, whether the court turned the responsibility of the defendant, upon the fact of his *knowing* that derangement would follow his drunkenness; or upon the moral turpitude of that vice, by which it imparts to all its consequences a character of criminality. I am likewise unable to ascertain, whether the jury convicted the prisoner, because, in their opinions, his insanity was not made out;

because the act which he perpetrated was not connected with his disease; or because they would not allow insanity, from drink, to constitute an excuse. The general impression is, that both the court and jury held, that Birdsell was not deranged in the degree that destroyed his perception of right and wrong, in reference to the murder; and that, if he had been, still he could not have been acquitted, because his alienation originated in intemperance.

It is not without hesitation, and a sentiment of deference, that I venture to dissent from both opinions. It seems to me, that the insanity of the culprit *was* sufficiently established; and that he was not capable of distinguishing between right and wrong, or at least of controlling his actions, on the subject of his hallucination. That subject was, the supposed infidelity of his wife, and her collusion with his *son*, and two of his neighbors, who conspired against his own life. In all his maniacal paroxysms, these ideas occupied his attention, and were conspicuously exhibited in the last attack. On Sunday he was intoxicated, but afterwards drank nothing. On Monday, Tuesday, and Wednesday, he was sober, and seems to have been regular. On Wednesday night he became sleepless and unwell; on Thursday morning he took his axe, and went off rapidly to one of his neighbours, requesting assistance, for they were going to kill him; he returned and spent the day in upbraiding his wife, and declaring that her supposed confederates were concealed about the house, making ropes to hang him; he barred the doors; when she went out in the evening he barred them after her; on her return, his conviction still continuing, he seized one of the instruments of defence which he had provided, and as she was sitting, unalarmed, by the fire, did that which was perfectly consistent with his false impressions,—put an end to her existence, as a punishment for her supposed criminal attachment to others, and to dissolve their conspiracy against his life. His daughter attempted to arrest his arm, which, in his estimation, brought *her* into the combination, and he aimed a blow at her. The murder being perpetrated, he made no attempt to escape; avowed and justified the act, but said he expected to be hung

for it; came willingly with the officer to the city; at times heard sweet sounds of music on the way, but at others talked of the canal which they travelled along, and of other common matters, with great composure, and perfect rationality. Deposited in jail, he soon manifested no further symptoms of mental alienation.

Now, I appeal to the enlightened members of the profession every where, whether here are not all requisites of a case of monomania:—Assumed and unreal premises,—deductions true to the principles of logic, but false in point of fact,—lastly, acts consistent with his conclusions. On other subjects he might have been regular enough, but on this he had gone estray; on others, he could judge between right and wrong; on this, his estimate of right and wrong took its character from his delusion. Had he killed, in a real dispute, some other person, not of the conspiracy, the act would have been foreign from his hallucination, and should not have been excused; but when he murdered one of the conspirators, he kept himself within the pale of that hallucination, and acted in accordance with his erroneous conceptions. Both the Court and prosecutor admitted, that he laboured under derangement; but because he manifested a perception of right and wrong on certain subjects, seemed disposed to argue, that he must have had a perception of right and wrong in reference to the subject of his insanity! I would ask, whether if he had been equally insane on all other topics, they would have looked for manifestations of a correct estimate of right and wrong? I think they would not, and still, to be consistent, they should.

It must not be forgotten, that it was admitted by all, that he was deranged. The difference of opinion related to its degree,—the prosecutor and others, regarding it as insufficient to justify him, others as sufficient. But he did an act, felonious in its nature, directly connected with his erroneous opinions; and I would put to them the question, whether, if he performed a sane action, and for such only could he be held accountable, it would be one connected with his insanity? I think not. *Non compos* cannot be of sound mind on the subject of his derangement, though he may be on every other.

I will here take occasion to say, that of the various forms of mental alienation, monomania, or partial insanity,* is not only the most dangerous to the peace of society, but by far most difficult to establish to the satisfaction of an ordinary jury. The broad and hideous features of *general* madness, or mania proper, cannot be mistaken by the most ignorant; but such madmen are generally harmless. They may give an unlucky blow, but they have no design, no plan, no perseverance, no concealment. Not so with the monomaniac. On some subject, or group of subjects, his conceptions are wrong, and his assumptions false. The error lies in his premises, more than his conclusions; you may reason him into a modification of the latter, by correcting his logic: but no argument, persuasion, or authority, can drive him from the former. The spirit of his delusion cannot be exorcised. It governs him with despotic power, but its jurisdiction is limited. He has, as it were, two cotemporary states of intellectual being, with alternate manifestations; one in common with those around him; the other peculiar to himself. In the former, he feels, and thinks, and acts, in consonance and sympathy with his race; in the latter, he contemplates nothing but the objects embraced in his delusion; and regardless of consequences, looks only to their accomplishment. In his morbid state, we may often see much of his original character. If mild, timid, and benevolent, his insanity is less to be dreaded—if suspicious, he becomes jealous—if proud, haughty and impetuous—if ill natured, ferocious and revengeful. Hence, men of bad passions are most likely, when insane, to commit outrages, and are least likely to receive the commiseration of society, or the courts of justice, which seems to have been the character and fate of the convict Birdsell. But whatever may have been the natural disposition of the monomaniac, or the nature of his delusion, it can never be pronounced absolutely safe, to allow him unrestrained liberty. His hallucination may con-

*It may not be amiss for us to recollect, that a *partial* insanity is not an alienation slight in degree, but limited in the extent of its objects. Under this view a derangement may be on a single point only, and still have a character of most terrific energy.

tinue the same, but the actions which it originates, may vary from day to day. He may alter his plan of operations, while his objects remain unchanged. Passions the most opposite may possess him in successive hours. The flame which lights them up is not from without, but lies smouldering in the recesses of his own bosom. Hence his conduct cannot be foretold. He sets prediction at defiance, and at the moment when the watchmen around him cry 'all's well,' he may be meditating outrages of the bloodiest die.

Since I began this paper, I have more than once laid down my pen, to listen to the story of a monomaniac. Five or six days ago a stranger applied to me for professional advice, and recounted so many bad symptoms, as at first to astonish me. At length I asked him the cause of his indisposition, and he told me with a low and earnest voice, that he had been poisoned by a woman in a distant state. Suspecting insanity, I advised him to take a warm bath, to promote the expulsion of the poison through the skin, and call on me again. Three days afterwards he joined me in the street, and informed me, with great concern, that the woman who had poisoned him, was now on her way up the Ohio river, and would certainly take his life. I said, I hoped not. But, said he, how can it be prevented? Let me know, I replied, when she arrives, and I will protect you. But, how *can* you, he asked, she works secretly? I must not tell you, said I, or it will take away my power. This seemed to increase his confidence, and with many expressions of gratitude, he left me to watch the arrival of the steam-boat. The next day he came to my office, in a state of increased alarm, to inform me, again, that she was hourly expected; that her husband was with her, and that lodgings had been provided for them in a certain part of the city, which he described; that she was considered a respectable woman, in society, but had killed several men; that he had loved and addressed her, but was superseded by the richer man, to whom she is now married; that she first gave him arsenic in an apple, and afterwards poison on a rose, which had penetrated all parts of his body, except his heart, which was only

protected and his life saved, by wearing over it a charm cut out of paper; that when she arrived, she would certainly kill him, and afterwards *must* kill her husband, because of their having addressed her as rivals. At length he declared, that if he should see her in the street, he would take her life. But, said I, that would be wicked; to which he replied, should I not do it to save my own life? That is true, I remarked, but you would be taken up and hung, and you had better die by her hand than that of the hang-man. This seemed to confound him, but not to quiet his alarm. I succeeded, however, in composing him, by renewed assurances of my power to countervail her designs, even without seeing her, provided I could know when she arrived; and he left me for the night, to watch her coming. The next morning he returned to tell me in a whispering and agitated voice, that she would be at the quay in half an hour, accompanied by two negroes as accomplices, and begged me to be prepared; I renewed my assurances, and advised him to be quiet and keep out of her reach. At noon, he came to me in the street, to say, that he had watched throughout the morning, but she had not yet arrived;—since which, one night has elapsed, and I have not seen him. This unfortunate man has an agreeable but anxious countenance, dresses decently, possesses some intelligence, and converses well when his attention can be diverted from the narrative which I have given. I have no doubt that he is deranged. The story of the expected arrival of a woman may be an illusion; but suppose it real, and that he believes her in quest of him to take his life, after having twice attempted it already, would it be either remarkable or criminal, if he should kill her? It certainly would not; and yet if he were to do so, I apprehend that according to the proofs of madness required in the case of Birdsell, he would be punished.

Should I even sue out a writ of lunacy against him, it is not probable that the court would sustain it, seeing that the proofs of his madness are not so strong as those adduced on the trial of Birdsell,—which were held to be insufficient. And here I will take occasion to remark, that far less evi-

dence of insanity might justify a court in granting a new trial, than would warrant a jury in finally acquitting the prisoner, on the ground of his being *non compos mentis*. A new trial to Birdsell could not have prejudiced society. The fact of the murder could always have been established. If testimony should have been lost, it would have been that which went to prove his madness, and such a loss would have injured him, not the commonwealth.

I am aware that *Mania a potu* often presents only the phenomena of false and disassociated perceptions, like febrile delirium; but this is not always the case. The histories of it, which have been published, have been generally drawn up with a reference to the practice of physic, rather than of jurisprudence; and, therefore, much has no doubt been omitted, that would go to show ,in different cases, some kind of specific delusion in the midst of the general desolation.—Whether it partake most, however, of delirium, of mania, or of monomania, the person affected cannot be regarded as of sound mind.

But dismissing this subject let us inquire into the validity of the opinion that *Mania a potu* cannot be plead as an excuse for actions criminal *per se*. I have already discussed this subject at some length, but shall venture to resume it. If this variety of mental alienation cannot constitute a valid defence, it can only be from the character of its remote cause. But I would ask, whether the court and jury have a right to travel behind the testimony which establishes the insanity, to inquire into its causes, and estimate the culpability of *non compos*, not by the degree of his alienation, but the criminality of those causes? I think they have no such right. But if it is correct for them to do it in one case, it is equally so in all others; and whenever insanity is offered in defence, its causes should be ascertained and made to determine the guilt of the accused. This I apprehend, would be a new principle in jurisprudence. Let us look at the practice to which it would lead. *Mania a potu* is, sometimes, the consequence of the use of opium; and frequently results from daily stimulation with ardent spirits, without their being ever taken to the extent of intoxication.

Now all the acts of a *non compos* from either of these causes, must be pardoned, because there is nothing criminal in such use of stimulants. Moreover, drunkenness itself is not unlawful, and cannot, therefore, impart a character of criminality to the actions of him in whom it may excite insanity. There are, however, many other causes of this malady which *are* criminal, such as gambling, duelling and prostitution, all of which should be inquired into, and when found real, must, if the principle is adhered to, be made to impart criminality to the actions of *non compos*; while he would be exempt from punishment, if his derangement arose from causes not immoral. But this, I venture to assert, was never done in any country. The truth is, that the immunity from punishment, results from the insanity itself, and not from the nature of the causes which produced it. Further, although *Mania a potu* is essentially a temporary disease, it often happens, where there is a predisposition, that insanity is permanently established by intemperance. Now, in such a case, referring to its exciting cause, the individual should be held responsible, throughout the whole of his after life; but the law expressly exempts him from all punishment, save the confinement which his own personal safety, not less than that of society, imperiously requires.

But what shall be said of the doctrine, that the criminality of a *non compos* from drink, lies in his *knowing* that his intoxication will be followed by insanity? The proposition at first view seems plausible, but some difficulties, both in theory and practice, hang about it.

The bad acts of the first paroxysm would thus be separated from those of all the subsequent paroxysms. *Legally* they would be innocent, while the same conduct, in future attacks, would be criminal. Again, all maniacs are not conscious of their insanity after it has passed off, and although they might be told that they had been insane, it by no means follows that they could believe it. Further, although the drunkard who has never had *Mania a potu*, cannot forsee, that it will come upon him, and must, therefore, under this doctrine, be held excusable for felonies, yet it is undeniable,

that he knows the general fact, that intemperance is apt to occasion madness; and how slight is the shade of difference between that knowledge, and the knowledge of him, who is subject to *Mania a potu!* They pursue the *same* practices, one with the information that he may *possibly* be made insane, the other with the conviction that he will *probably* fall into that state. I cannot perceive in the two cases a metaphysical or moral difference, sufficient to justify a legal distinction.

A great variety of causes are *known*, among other sinister effects, to produce insanity. Suppose an individual do not avoid these causes, is he *therefore* to be held accountable when he becomes insane? This will scarcely be contended for, and yet it might be found difficult for the ablest judge to chalk out a line of demarcation. Hence I am disposed to doubt whether the doctrine ought not to be abandoned. I perceive no moral or legal necessity for its retention. There is no previous malice towards those who may happen to suffer from the acts of a *non compos;* he does not subject himself to the causes of insanity, for the *purpose* of inducing the malady, that he may under its protection commit a felony; and after his insanity has arisen, he is incapable, in a legal or moral view, of acting with malice. I am, therefore, led to question the soundness of the Massachusetts decision, which condemned M'Donough for the murder of his wife; notwithstanding it has received the approbation of such an eminent medico-jurist as Dr. Beck.* It appears that the wound on M'Donough's head, was of itself sufficient to bring on paroxysms of insanity, but that when they were pending, intoxication instantly excited them. In one of these fits he murdered his wife. He could not have foreseen this, or any other criminal action; he did not, therefore, drink with malice prepense; and his crime seems to have been, merely that he did not refrain from that which promoted the recurrence of the paroxysms, but involved no malice, and is not prohibited by our criminal law. Suppose he had killed her in one of the paroxysms which came on without previous intoxication? The

* Medical Jurisprudence, Vol. 2, p 375.

court would not, then, have condemned him; but the event might as well have happened in such a paroxysm as any other. When the law makes malice aforethought, indispensable to the crime of murder, a homicide committed by *non compos without* such malice, cannot constitute that offence.

The law however, does not excuse him, who unintentionally commits a criminal act, when attempting to perpetrate a felony of a different kind. The evil design of the first act, imparts criminality to the second, although it may be a mere casualty. But where is the malice or the evil intention of the drunkard? When M'Donough and Birdsell drank to excess, was it with any felonious intention, or did they violate the law of the land? Moreover, the mental alienation which is called *Mania a potu*, comes on after the individual has ceased to drink; and, therefore, if drinking were felonious, the acts of the maniac could scarcely be said to derive criminality from it. If a robber by *accident* kills the person whom he robs, or any other, while in the perpetration of the deed, he is guilty of murder, but if he return home with his booty, and the owner, instead of resorting to the law, should subsequently invade the dwelling of the thief, to recover his property, and should be killed, it would not be murder.

It has been said, that if the drunkard were not held responsible for his doings when affected with *Mania a potu*, he would only have to feign that malady, to escape punishment for all the crimes he might desire to commit. But drunkards are far from being well qualified to simulate madness. Their feelings and judgment are in general too much impaired, to admit of their executing such a delicate and difficult task. Moreover, the strongly marked constitutional or bodily disorders, which attend on *Mania a potu*, could not be produced at the will of the individual, nor by any means which he might employ for that purpose. But why provide so carefully against feigned insanity in drunkards (who are generally incapable of such an act) and leave all the bad men of society at liberty to feign madness, as a cover for their crimes? To be consistent, the law should declare, that real insanity

shall no longer be plead in excuse, because pretended insanity has sometimes led to an acquittal of the guilty.

I shall conclude, by expressing the hope, that the case of Birdsell may incite our physicians and lawyers, to a closer study of mental alienation, particularly of *Mania a potu*, in reference to the laws of the different states. It is undeniable that the best of us have many incorrect opinions on this difficult subject: opinions which we owe it to the learned professions of which we are members, and to society at large, to correct as soon as may be convenient. In the observations which I have hastily thrown together, there are no doubt many inaccuracies both of thought and expression, but I hope they will promote inquiry, and having that effect, they cannot fail to do some good.

P. S. Desirous of collecting and publishing authentic cases of *Mania a potu*, drawn up with a reference to Medical Jurisprudence, and consequently containing an accurate account of the mental phenomena, the Editor begs leave respectfully to solicit histories of that kind.

Erratum. There is a mistake in the baptismal name of Birdsell, the subject of the foregoing paper; it should be John instead of James.

ART. VII.—*History of a case of Empyema from protracted Measles and Pleurisy, in which the operation of Paracentesis gave immediate relief.* By Dr. SAMUEL MERIWETHER, of Jeffersonville, Ind.

Calvin Cook, a youth of nineteen or twenty, of sanguineous temperament and delicate fibre, was attacked with measles some time last winter, perhaps in February, (1829) while at work on the Louisville and Portland Canal. He returned home to his mother's (Clark co. Ind.) where he remained a few weeks, when he was able to resume his labor. His cough remained, however, and from his exposed situation he was taken with Pleurisy, attended with violent pain in the left lobe of the lungs. From the best information I could gather, he was neglected or not regularly attended by his physician, and became emaciated, with cough, dyspnœa, a

gradual enlargement of the left side, difficult respiration when placed on the right side, general debility, and hectic exascerbations.

On the third of May, I was called into consultation with Dr. Lewis. On examining the patient, I concurred with the doctor in the opinion, that an operation was the only means of relief that could be employed. The chylopoietic viscera appeared to be effected from contiguity or sympathy of parts, as there were considerable tension and tenderness at the pit of the stomach, with enlarged spleen; he was therefore directed to take a cathartic. On the morning of the 4th, Dr. Lewis visited the patient. The medicine had operated, and dejections from his bowels were healthy. During the evening he had two chills, with an entire absence of pain, &c. On the morning of the 5th, in company with Dr. Bridges, I visited our patient, and found his heart beating with considerable force on the right side, with general œdema of the left, which measured from the spinal column to the sternum nearly double that of the right, and had an indistinct fluctuation.

I gave the young man our opinion relative to his case, and that an operation was the only means of relief. To this he submitted with fortitude. Proceeding to the operation he was laid close to the edge of the bed, (previously made firm) with the affected side presenting. I made an incision between two and three inches long through the integuments, betwixt the sixth and seventh ribs, cutting close to the edge of the seventh, and carefully avoiding the intercostal artery; on the knife's passing through the intercostal muscles, the distension of the pleura costalis was very great, and on puncturing it a volume of pus issued forth, and continued to run for forty minutes; when his pulse became so languid as to require an immediate dressing of the wound. He expressed himself better under the discharge. We gave him an anodyne and directed wine and water to be given during the evening, should his pulse continue weak and low.

On the morning of the 6th, I found him every way better; he was free from fever, slept pretty well, had some appetite,

and his respiration was easy, whether he lay on one side or the other. The distended ribs had subsided and likewise the œdema; the wound appearing to close, I introduced a blunt pointed probe and leaden canula about one and a half inches long, which kept up a discharge for two weeks at least.—The quantity of pus evacuated from first to last was judged, by all present, to be two gallons. From this time the patient's treatment was committed to the care of Dr. Lewis, by whom I have since been told, that the quantity of matter discharged while under his care, was equal to the first. His health is now fast improving, skin soft and perspirable, secretion from the kidneys and liver healthy, free from cough, wound entirely healed, and he takes gentle exercise every day on horseback or in an easy carriage. The general treatment has been aperients, elm or flax-seed tea, with Dover's powder occasionally at night, and lastly the sulphate of quinine as a tonic.

June 10*th*. 1829.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

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ART. VIII.—*A Treatise on the Diseases of the Chest, in which they are described according to their anatomical characters; and their Diagnosis is established on a new principle by means of Acoustick instruments, with plates. Translated from the French of* R. T. H. Laennec, M. D. *with a preface and notes,* By JOHN FORBES, M. D. *&c. First American Edition, Philadelphia,* 1823. 8vo. *pp.* 319.

A short Treatise on the different methods of investigating the Diseases of the Chest. Translated from the French of M. Collin. By W. N. RYLAND, M. D. *From the third London edition; with plates and an explanatory introduction by a Fellow of the Massachusetts Medical Society. Boston,* 1829. 12mo. *pp.* 133.

If we have passed through more than two years of a *sort* of editorial life, without having presented to our readers the discoveries and inventions of Laennec, it has not been because we thought them of no value. On the contrary, after deducting all the advantages which enthusiasm has superadded to the catalogue, we still find enough left to fix the attention of the profession. To what extent that attention has already been directed upon this subject we are not fairly prepared to say; but of this we are convinced, that neither in Great Britain nor America, have the labors of that distinguished physician been duly appreciated. Having at length taken up the subject we propose to prosecute it in the present and future numbers of the Western Journal, until all the important facts which relate to it, shall be fairly set forth.

Besides many vital and chemical processes, the THORAX is the seat of two mechanical operations, the one *pneumatic* the other *hydraulic*—the former executed by the lungs and parieties of the chest, the latter by the heart. In the present

number for the sake of simplicity we shall confine ourselves to the pneumatic.

The object of this function is the æreation of the blood. To accomplish this great end, so immediately indispensable to the continuance of all the other functions, a large quantity of air must be incessantly introduced into, and expelled from, the immense congeries of cells which make up the pneumatic portion of the pulmonary organ. In healthy states of this organ the phenomena attendant on this operation, present much uniformity of character, but performed in a cavity the sides of which are thick and bony, they generally pass unobserved. When either the lungs or the thoracic walls become disordered, these phenomena are of necessity altered, and this departure comprehends the signs of pulmonary disease. Till lately, the nature and degree of these aberrations from health, were measured by the pain and dyspnœa, the cough and expectoration, the posture of the patient, the absence or presence of tenderness on pressure, and by the pulse—methods which can never be abandoned for other means of investigation. It did not follow, however, that other means of diagnosis might not be superadded, and this is precisely what is attempted in the works which constitute the text of this article.

To the organs of touch and vision, we are indebted for the information collected on the old method, that furnished by the new, depends on the sense of hearing. The first step in this diagnostic method was made by Avenbrugger, the second and greater, by Laennec. By *Percussion* over the thoracic parieties, first palpably recommended by the former, we come to know, that in a healthy state, the chest emits on being struck, a peculiar sound, which is either changed, reduced or suppressed in its diseased conditions. By the *Auscultation* or listening of Laennec, we learn that the admission and expulsion of air into the pulmonary cells, and its vocal agitations in the larynx, can be heard and appreciated in health, and, consequently in disease—when the sounds emitted, are of necessity, more or less widely different from those ordinarily heard.

We will proceed to inquire into these natural accoustic phenomena.

First of PERCUSSION. When the lungs and parieties are healthy the chest struck returns a hollow sound not unlike that emitted by an empty barrel, though generally more obtuse. Every part of the thorax does not give out the same sound.

A clear sound is obtained whenever we strike upon a bony part covered by the skin only, or by thin muscles sufficiently stretched to transmit the shock wholly, without absorbing any of the sound.—The most favourable parts are, anteriorly, the clavicles, when they are not too much elevated and raised from the thorax; the space lying two or three inches below them; all the surface of the sternum, and the parts nearest the cartilages of the ribs.

In the remaining anterior part of the thorax, the mamma in females, the fat which covers over the middle and inferior part of the pectoralis major in many men, the vicinity of the liver on the right, and of the heart on the left, diminish the sonorousness natural to the thorax.

Upon the sides we may strike with advantage, in the hollow of the axilla, and three inches below it; but from the fourth and sometimes the third rib downwards, the sound is always less clear on the right, owing to the neighborhood of the liver; while on the left, it is often louder than it ought to be from the proximity of the stomach, particularly when that viscus is much distended by air; the resonance then becomes something metallic.

Behind, the most distinct sound is perceived along the costal angles. In thin persons we may percuss usefully on the supra and infraspinal hollows of the scapulæ, and upon the spine of that bone, but we cause no sound in striking upon the fleshy layer of muscles which fills up the vertebral hollows.—Collin, pp. 14—16.

If the subject be fat, or the integuments anasarcous, the sound *cæteris paribus*, is duller and weaker. The patient at the time of percussing him, should not be sunk in feathers, for this will vary the result. If possible, he should be seated with his arms raised over his head; or, if he lies down, he should be stretched on his back, upon a hard and level bed, with his arms in the position just mentioned. If he makes a deep inspiration and then holds his breath, the sound will be more intense.

On the manner of performing the operation, Collin has the following remarks, which should be read with attention.

We should close and bring together all the ends of the fingers half bent, or we should form them upon the same line, so that one may

not project beyond the other. We should then strike with an equal and moderate force upon similar parts, in the same direction and extent, making the ends of the fingers fall perpendicularly to the plane upon which we strike.

Too strong percussion would be painful; an unequal one would give an unsatisfactory result. It would be the same if we struck dissimilar parts, as a rib and an intercostal space; if the fingers inclined perpendicularly on the right, obliquely on the left side; on a space double or triple the extent on one side to the other, since each of these variations must necessarily modify the sound. It is also necessary not to examine all the points of one side before passing to the other, because we thus lose the remembrance of the results obtained in corresponding points; it is better to strike first on one side, and then on the other.

To fulfil all these conditions, none of which are superfluous, we must strike as much as possible with the same hand, and place it in the same direction relatively to the part struck.—pp. 17—18.

In the analectic department of a preceding number of this journal, we published a notice of an alledged improvement in percussing, made by Piorri. It consists in directing the blows upon a circular piece of ivory or wood, an inch and a half in diameter and one line in thickness, having a slender handle to keep it properly applied to the surface. It may be struck with any kind of small mallet. If this plate be used, percussion we are told may be made over the clothes. We have not ourselves employed it.

In diseases of the chest, the hollow sound returned by percussion is altered. It may be dull and obscure, entirely suppressed, or unnaturally clear.

Every time the lung loses its elasticity and becomes engorged, without however becoming totally impermeable, the sound becomes dull or obscure, according as the engorging of the pulmonary tissue is more or less considerable. Thus then an intense catarrh, bronchitis, the first degree of pneumonia, an œdema of the lung, produce this alteration.

The sound becomes wanting in two cases; 1st. When the lung loses its permeability completely, its tissue becoming dense, like the substance of the liver, in consequence of an abundant exhalation of blood into its areolæ, and of the combination of this liquid with its tissue. 2d. When it is compressed, thrust back by some accidental production, developed in its thickness, or in the cavity of the pleura, or when this cavity is filled by some fluid.—p. 20.

When the hollow sound is entirely suppressed, the noise under percussion, as Laennec has remarked, is like that emitted by the thigh or any solid, fleshy part when struck. The finger perceives, that there is no longer any elasticity in the parieties nor an empty cavity within. This can never occur over the whole thorax; for it implies a state of the parts incompatible with the function of respiration. It occurs chiefly in the lower half of the chest, and is oftener perceived on the right than on the left side, because the liver as we have already quoted, renders the inferior portion of that side, more inelastic than any other part; while, on the other hand, the stomach so often inflated with gases, renders the opposite side unnaturally sonorous, and may cause it to emit a hollow sound, when the lung is no longer permeable. We recollect a patient, in whom this was the case, though dissection after death, proved the left lung in its lower part to have been completely hepatized. It rarely happens, that the chest loses its sonorousness below a horizontal line passing through the nipples; for the larger bronchial ramifications remain pervious to the last; and when pus or serum is effused into the cavity of the chest, it necessarily accumulates in the inferior parts, extinguishing the hollow sound in these, while it is still emitted from the superior. Now as this fluid gravitates to the lowest parts of the cavity, it follows, that when the patient lies perfectly horizontal, it flows up along the spine, diminishing the hollowness of those parts, and increasing, or, to a certain degree, restoring that of the super-hypochondriac regions; a change which cannot occur if the lung be hepatized, and hence we are furnished with one means of diagnostic discrimination, between a disorganized lung and a pleuritic accumulation.

The sound acquires an unnatural intensity, when air, or some kind of gas, is extravasated or secreted into the cavity of the pleura (pneumo-thorax;) and in emphysema of the lungs, in which the air cells are permanently distended; but the most common cause, is extreme emaciation of the parieties; attended of course with absorption of the adipose matter about the base of the heart, and, perhaps also, of a portion of the

cellular tissue of the pulmonary organ itself. We have seldom sounded the chest in cases of great atrophy, unaccompanied with organic legions of its viscera, without finding its sonorousness unusually intense and acute.

We shall conclude this branch of our inquiry with an extract from each of our authors.

The signs furnished by percussion are of great importance; we must not however depend on them always; it may happen that the sonorousness of the chest may be altered by causes foreign to the organs of the cavity. Thus every large tumor in the abdomen, pregnancy, ascites, diminish the sonorousness, and contract the thoracic cavity, thrusting up the lungs; but no cause, entirely independent of the pectoral organs, can produce a complete loss of sound.—Collin, pp. 21—22.

We must still admit, however, that the mothod of percussion is far from being complete, or generally available. It frequently affords no indication in phthisis; and in no case does it enable us to distinguish this disease from chronic peripneumony. Even in peripneumony it fails us in a great measure, when the inflammation is confined to the centre of the lung, or when both lungs are equally affected, and only in a slight degree. It does not enable us to distinguish the disease just mentioned from pleurisy, hydrothorax, or any other effusion into the cavity of the chest. It completely fails us, or rather certainly misleads us, in the disease called *Pneumo-Thorax.*

Laennec, p. 210.

Secondly, of AUSCULTATION, and the practical use of the STETHOSCOPE.

If the car be pressed against any part of the chest of an individual, in whom that cavity and its contents are healthy, the entrance and exit of air in respiration can be distinctly heard. This species of auscultation or hearkening is denominated *immediate.* If instead of this, we interpose a solid and elastic body, between the thoracic parieties and the ear, the same sounds are heard; and this is denominated *mediate* auscultation, as being effected by the aid of means. This is the auscultation of Laennec; and the instrument which he invented for that purpose, is denominated the stethoscope, or chest inspector, as the Greek words of which it is composed may be taken to mean.

The annexed engraving, on type metal, and the description, are copied from the treatise of the inventor, and may aid those who are without his valuable work, in directing a common turner how to make the instrument.

Fig. 1. The Stethoscope or Cylinder, reduced to one third its actual dimensions.

a. The Stopper.
b. The lower half.
c. The upper half.
d. The auricular or upper extremity.

Fig. 2. Longitudinal section of the same, inverted.

a. The Stopper.
b. Point of union of the two parts.
c. The upper half.

Fig. 3. The same section, with the stopper removed.

Fig. 4. The Stopper.

a. The body of it, formed of the same wood as the rest of the instrument.

b. Small brass tube traversing the stopper, for fixing it in the tube of the Stethoscope.

Fig. 5. Upper half of the Stethoscope.

a. Body of it.
b. Screw (in the wood) for fixing the two portions together.

Fig. 6. Actual diameter of the Stethoscope.

a. Diameter of the canal of the Stethoscope.

The division of the instrument in the middle contributes nothing to its utility, and is designed merely to render it more portable; at the same time it is the most difficult part of the manufacture and the first to get out of order, so that in a new country where mechanics are scarce, it is better to keep the instrument permanently in one piece.

The wood of which it is formed ought to be of a medium density; it should be a foot long, an inch and a quarter in diameter, and its canal a fifth part of that space in calibre. A cylindrical form is the best, and from having this figure, Laennec frequently calls it the *cylinder*.

Fig. 1.

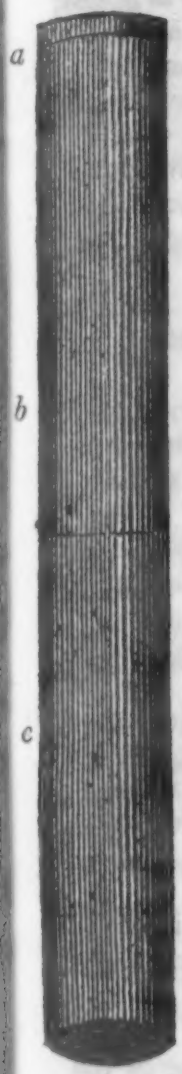

Fig. 2.

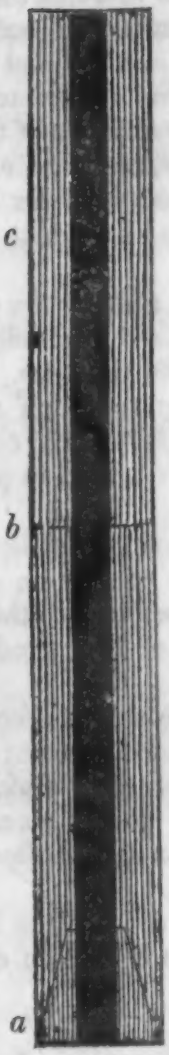

Fig. 3.

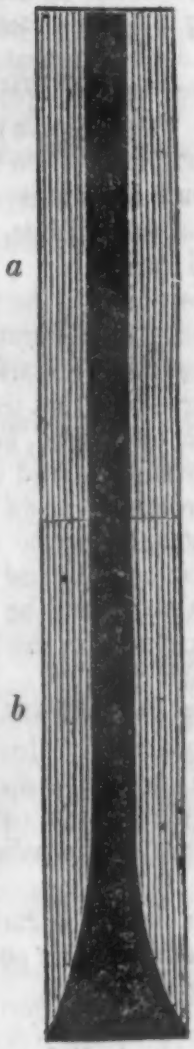

Fig. 4.

Fig. 5.

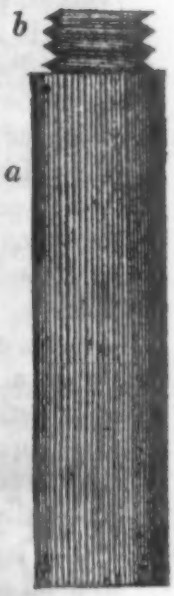

Fig. 6.

The following are rules useful to be observed in the management of the Stethoscope.

1. To procure stillness in the room in which the patient is placed, although to long practised auscultators, this precaution is in part unnecessary. Laennec repeatedly asserted that his organ of hearing was so adjusted to distinguish minute difference of sound, that he could at the same time, observe the movements of the heart—the noises produced during respiration by air, mucus, &c. in the lungs, and in the stomach and intestines; the noise of his own, and the patient's movements; and all this, while his students were moving and whispering round him.

2. The Stethoscope is to be used *without* the stopper, in exploring the phenomena of respiration, and the different *rattles;* and *with it*, to examine the circulation, and the voice.

3. It is not necessary that the part to which the Stethoscope is applied should be uncovered, but only that the covering be not too thick, be perfectly smooth, and not of a kind to produce a rustling noise, as silk or worsted will do.

4. The instrument must be applied perpendicularly, and so retained on the chest as to fit and press equally on every part, and at the same time the ear should be applied to the other extremity so as to exclude the external air, the hole of the cylinder being opposite the meatus auditorius.

5. In examining the respiration, the patient should be directed to respire a little more rapidly than natural, without creating a sound more audible than usual at a distance. In examining the voice, he may count aloud, slowly, in a natural tone of voice; and for exploring the different rattles, the patient should be directed to cough occasionally.

6. The observer should be careful not to place himself in a constrained position, and for this purpose it is often convenient to rest upon one knee.—pp. xiii, xiv.

To the foregoing judicious instructions for the use of the Stethoscope, compiled by the American Editor, we shall only add, that it should be held as we hold a pen in writing; and that when the patient is greatly emaciated, so that every part of the extremity of the instrument cannot be made to press equally upon the parieties, it is necessary to interpose a little lint, or cotton wool, or one of the ivory pieces used by Piorri in making percussion.

Our authors greatly prefer *mediate* to *immediate* auscultation; but the writer in the Medico-Chirurgical Review to whom this subject has been confided, thinks their preference not very well founded; and our own observations incline us to unite in his opinion. Even while composing

this article, we have had occasion to examine a patient in whom the respiratory murmur was more audible and distinct, when heard by the application of the ear to the chest, than when listened to through the cylinder.

We are now prepared for studying the natural phenomena of respiration; without an accurate knowledge of which it is obviously impossible to understand the language of disease which is spoken through the stethescope.

On applying the cylinder to the thorax of a healthy man, we hear, at every inspiration and expiration, a gentle but very distinct noise, which indicates the penetration of the air into the pulmonary tissue, and its expulsion from it. It may also be perceived clearly that the air is received into a series of very small cavities, which expand to admit it, and not into one large extensive cavity.

This murmur is nearly equally strong in all points of the chest, but most so in those at which the lung is nearest to the surface of the skin, that is at the superior lateral and the posterior inferior parts. The hollow of the axilla, and the space between the clavicle and edge of the trapezius, are the points where it has most intensity.

Upon the trachea, larynx, and root of the lungs, the respiratory murmur is heard perfectly, but it has a particular character, which gives an idea of the air passing into a larger passage than that of the air cells. Neither do we distinguish the expanding of the pulmonary tissue, and the air seems to be attracted from the cylinder in inspiration and repelled in expiration. We may compare this mode of respiration, which we shall call tracheal, (bronchial) to the blast of a bellows.—pp. 28—29.

The student of auscultation, should, diligently and patiently, devote himself to the practical study of the phenomena described in the foregoing extract; for they must constitute his standard comparison in every clinical inquiry with the stethoscope.

The more frequent the respiration, the louder is the murmur; and hence, when it is obscure we should direct the patient to make short and quick inspirations. In women it is generally more audible than in men, except those of a feminine or nervous temperament. In children it is more intense than in adults; and among the latter, it is exceedingly different in different persons, all enjoying good health.

Having made himself acquainted with the healthy respiratory murmur, in its various modifications, arising from age,

sex, temperament, and comparative corpulence, the student should next apply himself to the study of the voice.

On applying the cylinder upon the thorax, a confused resonance of the voice is heard; its intensity is not the same at all points.

The parts where it is strongest, at the axilla, the back between the inner edge of the scapula and the vertebral column, the anterior superior part of the chest, towards the angle formed by the junction of the sternum and clavicle.

At those spots the voice seems stronger and nearer to the observer than with the naked ear; in other parts, more particularly below and behind, it seems weaker and more distant, and produces a confused sound, in which nothing articulate can be distinguished.

In men who have a deep-toned voice, this resonance is stronger but flat, confused, and nearly equal at all points; it is clear and very distinct in persons whose voice has a sharp tone, in women and children. Finally, the agitated and trembling voice transmits the resonance very weakly, and in cases of aphonia is wholly absent.

pp. 31—32.

The student is now qualified for the study of pathological phenomena, or those modifications of the natural phenomena just described, which are produced by some kind of lesion of the lungs, or the parieties which enclose them. These phenomena are connected, 1. With the respiration; 2d. With the voice; 3d. With the respiration and the voice.

1. *Phenomena furnished by respiration.*

When the respiration becomes stronger than in the natural state, it assumes the character of that observed in infants, and has, for that reason, been named by M. Laennec, *puerile respiration*. This increased intensity of the respiratory murmur is never observed in cases of lesion of the lung, or of a part of the lung. It is met only in the healthy parts of the lung, the action of which is temporarily increased to supply the loss of the part diseased. Thus in pneumonia, it is not uncommon to find the respiration puerile in the parts not affected by the disease. However, we see this exaggeration of respiration coincide with a great dyspnœa, in some cases of asthma and of hysteric suffocation: it is difficult to account for this anomaly. We have thrice observed the respiration stronger than in the healthy state, in parts which have been attacked with pneumonia on the following day. This respiration was not truly puerile; it seemed to occur in a vast cavity immediately below the cylinder nearer to the surface of the body than it does in the thinnest persons.

In those three cases the peripneumony perhaps already occupied the centre of the organ, and the air vessels nearest to the surface alone were fit for carrying on respiration.

The respiratory murmur offering numerous varieties in the healthy state, it is only by examining different parts of the pulmonary organs that we can judge of its diminution. This comparison is always easy, for it is rare to find the respiration weakened in a whole lung, or in both together. The intensity of the noise offers many degrees, from a slight diminution to the most complete absence. The small extent of the movements of the thorax seems most commonly to be the cause of this diminution: it often depends also on the incomplete obstruction of the bronchial tubes of the middle size, owing to swelling of their lining membrane, or to the presence of accumulated sputa. We find it also in cases of membranes continuing soft, and only beginning to be organized.

The absence of the respiratory murmur may proceed from many causes. It occurs when the lung is become impermeable to the air, or when a liquid is interposed between it and the thoracic walls, or any other body accidentally developed, which prevents the transmission of the sound. It is rarely observed in the whole extent of one side of the thorax. The clavicles and the root of the lungs are the points where it occurs most rarely; perhaps never in the latter of these parts.

The tracheal respiration, of which we have spoken in treating of the natural phenomena, is sometimes observed in other points than those in which it is perceived in the healthy state. It cannot take place unless there be formed in the lung an excavation of considerable size, communicating freely with the bronchia, or being continuous with them. It has seemed to me also to arise from a hardening of the hepatized pulmonary tissue, which transmits to the ear the motion of the air in the great bronchial pipes, more noisy from the impossibility which the induration offers to the penetration of the air into the bronchial vesicles. Whatever be the intensity of the respiratory murmur, it may be either pure, which indicates that the bronchia are perfectly free, or it may be attended with rattles.

pp. 38—41.

The last word of this extended extract, introduces us to several pathological phenomena deserving the strictest attention. The term *rale*, employed by Laennec and the different writers of his school, and translated *rattles*, includes 'every kind of noise attending the circulation of air in the bronchia and vesicles, different from the murmur produced by it in the healthy state.' The *rattles* are seldom heard over the whole extent of the chest. They are, in the majority of cases, perceptible but in a spot not very extensive, the respiratory murmur remaining natural, or becoming puerile, that is excessively loud, in other parts of the chest. 'The rattles,' as Collin observes, 'announce either the contraction of some

part of the bronchial tubes, or their being gorged by some fluid, or, finally, a similar state of the air vesicles.' It is obvious enough, that the noise denominated *wheezing* is included under this definition, along with that to which the word *rattles* is usually applied.

Collin, systematysing the observations of Laennec, enumerates four kinds of rattles ; the *dry sonorous*, the *hissing*, the *mucous*, and the *crepitating*. Some of them are best heard when the patient coughs; others, and the greater number, in connexion with the respiration; they may exist singly, or coetaneously in different parts of the chest; be permanent through the whole course of the disease, or intermit. Regarding every thing relative to this genus of morbid phenomena, as of deep and curious interest to the clinical practitioner, we shall transcribe, entire, the condensed and instructive remarks of our author on each species.

The sonorous rattle.—This consists in a sound more or less grave, and often extremely noisy, resembling at one time the snoring of a sleeping man, at another the sound produced by rubbing the string of a bass vial with the finger, and frequently the cooing of a dove. It appears to be owing to the contraction of the bronchial tubes by the swelling of their lining membrane, or to some change in the form of these canals, perhaps to the thickening of the spurseperons at the point of division of the bronchia, a thickening we almost constantly observe in subjects who have fallen during the continuance of a catarrh, either acute or chronic.

The sibilant or hissing rattle.—It resembles a prolonged hiss, and accompanies either the end or commencement of inspiration, or of expiration. It is grave or acute, dull or sonorous. These two varieties are sometimes met together in different parts of the lung, or succeed each other in the same point, at closer or more distant intervals. It depends on the presence of mucosity, not very abundant, but thin, viscous, obstructing more or less completely the small bronchial ramifications which the air must traverse to reach the air vesicles. It seems to me to indicate an alteration of the lung, deeper than the preceding, that is to say, occupying finer ramifications; and when it is heard in a great part of the organ it is attended with more constraint of respiration. It is during the existence of the sibilant rattle that we observe those mucous sputa of an orborescent appearance, presenting to the eye the form, calibre, and ramifications of the small tubes from which they have been propelled by the effort of coughing.

The mucous rattle.—This rattle, produced by the passage of the air through sputa accumulated in the bronchia or trachea, or through

softer tuberculous matter, denotes by its nature the unctuous untenacious state of the liquid which fills the air tubes. At one time it is weak, and produced at remote intervals; at another it is strong and persistent. In the first case it may be judged that the column of air meets only at intervals the mucosity which produces it; in the second, that the bronchia are almost entirely filled with it. Carried to the highest degree it constitutes gurgling, the name by which we characterize the noisy murmur caused by the agitation of tuberculous matter, or purulent sputa, with the air traversing them.

Crepitating rattle.—This consists in a noise which may be justly compared to that of butter boiling, or of salt crackling on a hot bassine plate, or to that produced by squeezing a bit of dried healthy lung between the fingers. It seems to be owing to the exhalation of blood into the air cells, observed in a lung affected with the first degree of pneumonia, of which the crepitating rattle is the pathognomonic sign. A new proof of the reality of this cause may be drawn from an analogous kind of injury in œdema of the lung, characterised by a variety of this rattle of which I am about to make mention. This variety has very striking characters; and if we have not made a particular species of it, it is because it is difficult to describe its differences exactly, though they are very sensible to the ear; and it is enough to have heard the two kinds once, not to confound them afterwards. The name of subcrepitating, given to it by M. Laennec, indicates its character well. In reality, this rattle is analogous enough to the first, but it gives a sensation to the ear that the liquid which produces it has more tenuity and less plasticity than the crepitating rattle. On opening the dead bodies of subjects affected with œdema of the lungs, we find this viscus filled with a limpid serous fluid without viscosity which fills up the bronchia and vesicles, and is filtrated into the interlobular cellular tissue, rendering the lung flaccid and inelastic.

Such are the different rattles audible with the cylinder. We see by their description that they cannot be mistaken, and each offers very striking characters; but their differences are often less sensible, and shades, which practice teaches us to seize, and which words cannot express, establish a sort of transition between each of them, and indicate a mixed lesion, more or less like that indicated by each individually.—pp. 43—47.

2. *Phenomena furnished by the voice.*—These are embraced under three heads—*resonance*, *pectoriloquy*, and *ægophony*. We shall consider them separately.

Resonance.—We have found not a little difficulty in distinguishing between resonance and pectoriloquism, in the earlier periods of our auscultic trials; and the translator of Collin, cautions beginners against this mistake. Resonance, in the language of auscultation, is a sonorous resounding of the

voice, in a part where it cannot be heard in health. But it is not the speech which is heard. The observer perceives no articulate sounds. A confused noise only, reaches his ear through the cylinder.

Pectoriloquy.—This word explains itself. It is the speech of the breast. The articulated voice of the patient seems to pass from the spot upon which the stethoscope rests, along or through the tube of that instrument, to the ear of the observer. The sound is similar to that heard when the cylinder is applied to the trachea, and by thus applying it to a person in health, the auscultic pupil will soon become familiar with the sound which characterizes the morbid phenomenon under consideration.

This phenomenon is always owing to the presence of excavations in the lung, communicating freely with the bronchia, and wholly or partly empty. It may be met with in all points of the chest; but the parts in which it is observed the most frequently, are, below the clavicles, in the hollow of the axilla, the space between the clavicle and the trapezius muscle, the supra and infra spinal fossa. These parts all correspond to the summit of the organ, and it is in that part in reality, that excavations, produced by the softening of tubercles, are most frequently detected.

Pectoriloquy offers some variety, arising from difference in the tone of the voice, the size of the cavity, its form, the firmness or softness of its walls, their adhesion or want of adhesion to the costal pleura, or to the difficulty with which the air penetrates them.

1. The more acute the voice is, the more evident is the pectoriloquy; it is almost always imperfect and sometimes doubtful in persons of a deep-toned voice. Aphonia does not make it disappear completely; and it often happens in these cases, that we can distinguish what the patient says, better with the cylinder applied to the point of the chest where the cavity exists, than with the naked ear at the same distance.

2. Perfect pectoriloquy requires the cavity to be of moderate extent. In very large cavities it changes to a stronger, deeper sound, analogous to that of the voice transmitted to some distance through a scroll or trumpet made of paper. In very small caverns it is often doubtful, particularly when the excavation is central, and surrounded with parts of the lung still permeable to the air.

3. The winding disposition of the cavities, or the direct communication of a number of excavations with one another, give something of a confused or stifled sound to the pectoriloquy; the voice seems badly articulated.

4. The firmer and thinner the walls, the more perfect the pectoriloquy. When cicatrization has produced a membrane of a fibro

cartilaginous nature over the whole surface of one of the cavities, pectoriloquy acquires a metallic tone, sometimes so noisy as to injure the clearness of the perception of the sounds.

5. An excavation placed near the surface of the lung, the thin wall of which does not adhere to the costal pleura and skins in expiration, does not yield pectoriloquy; we then recognize its existence by other characters. On the other hand, a superficial excavation with thin adherent walls, gives a striking pectoriloquy with a force which fatigues the ear.

6. The less fluid there is in the excavation, the more evident is the pectoriloquy, because the communication with the bronchia is then usually large, and permits a free access to the air. However, this communication may be destroyed more or less completely, and for a longer or shorter time, by the stagnation of the sputa in the bronchial tubes; it is this which sometimes renders pectoriloquy doubtful, and gives it that intermittent character not rarely observed. There are days in which we can hardly find one case of it in a ward in which the day before we observed a great many: we perceive then that in most cases the expectoration has been but small, or wholly deficient.—Collin, pp. 50 53.

As pectoriloquism is produced by the voice resounding in pulmonary excavations, it may be regarded as the pathognomonic sign of the existence of accidental cavities in the lung; nevertheless, Collins and Cruveilheir have met with cases which seem to show, that pectoriloquism may be emitted by the larger bronchial tubes, when the lung, from chronic pneumony or some other cause, has become hepatized or indurated, so as to transmit the vibrations of the voice more perfectly. This kind of pectoriloquism is obviously allied to resonance. To this phenomenon, Laennec has given the name of *bronchophony.* We have frequently met with it in lean persons; in some of whom it seemed to be a natural sound, rather than the product of disease.

Ægophony. This is the hægophony of the first edition of Laennec; who bestowed upon it this name, from its resemblance to the bleating of a goat. It has been confounded with pectoriloquy, and still oftener with bronchophony.

Ægophony is a strong resonance of the voice, more sharp, more acute, than that of the patient; in some degree argentine, jerking, and tremulous, like that of a kid. This phenomenon may be produced in the whole extent of the chest, on one side only, or on both sides at once; but it is rarely that it is not confined to a tolerably circumscribed space, of which the vertebral column, the inner border of the scapula, its inferior angle, and its outer edge, form the limits.

When it exists on both sides together, it is difficult to decide whether it be a consequence of disease: in some subjects the natural resonance of the voice at the root of the lung has this sharp bleating character.

Hægophony varies much in force and extent; but however weak it may be, it seems to me always to indicate with certainty the existance of a moderate quantity of liquid in the cavity of the pleura, or of pseudo membranes tolerably thick, and still soft.

When the effusion becomes too abundant or too small in quantity, hægophony ceases to exist. I have never found it when the effusion of the liquid took place very rapidly, and the affected side was filled almost as suddenly.—pp. 56—57.

Of the various morbid phenomena of the voice, this has always seemed to us the most difficult to explain. The following are the observations of Collin, touching this point, from which the reader will perceive, that a true explanation is, perhaps, still a desideratum.

Can this phenomenon be explained by the quivering of the voice on the surface of a liquid, as M. Laennec formerly thought? Or is it owing to the flattening of the bronchial tubes, as he teaches at present?

A woman presented hægophony towards the root of each lung in turn: she died. No liquid was found extravasated; the flattening of the bronchia was not very evident.

Another died after long suffering. For three years she had been pectoriloquous in the summit of the lung, and hægophonous at the root of that organ in a very circumscribed space. There was no extravasation, and although surrounded by a very dense pulmonary tissue, the bronchia did not appear to me altered in their form.

A man was carried off by pneumonia; the dullness of percussion, the presence of hægophony, and the absence of all respiratory murmur, had made the existence of effusion be suspected: four hours before death the patient was still hægophonous. There was no liquid extravasated however; but there was a tolerably thick and slightly consistent layer of false membrane upon the root of the lung. The bronchial tubes offered nothing particular. I will confess that it is very difficult to discern whether there is flattening of these tubes or not; they are not naturally cylindrical, and perhaps a very slight degree of closing may cause hægophony.

These three facts, unique as far as I know, do not hinder me from believing that this phenomenon indicates with certainty a moderate extravasation of fluid into the cavity of the thorax; but they seem to me sufficient to make us reject the first explanation of hægophony, and insufficient to prove the second.—pp. 57, 59.

3. We come in the third and last place, to notice certain morbid phenomena connected both with the respiration and the voice. They are *metallic respiration*, *metallic resonance*, and *metallic tinkling*. Several different lesions give rise to the sounds which are expressed by these terms.

These morbid states are a fistulous communication between the cavity of the pleura and the bronchia, and the accumulation of a certain quantity of air in the sac formed by that membrane; an effusion both liquid and gaseous, with or without communication; finally, a very large excavation, with thin and compact adherent walls. Metallic respiration, and metallic resonance, will exist in the first case; metallic tinkling will be joined to them in the third, or will be found alone if there be no bronchial fistula.

If we make a patient in whom this communication exists, breathe strongly, the air in penetrating the pleural cavity, produces a murmur similar to that caused by blowing into a rather narrow-mouthed metal vessel. If we make him speak, his voice bounds under the cylinder, and resounds as if he spoke in a cistern. This is the more striking, as the phenomenon is sometimes evident only at the end of the sentence, and seems to be an echo.

Finally, if an effusion both gaseous and liquid exist, and we make the patient rise, to examine him, it sometimes happens that we hear a sound of short duration, similar to that of a drop of water falling into a decanter three-fourths empty. It seems as if a drop remained sticking to the upper part of that cavity, and falling into the lower part, then occupied by the effused fluid, produced this noise by its fall into the mass of liquid.

These phenomena never failed to become evident, from time to time, at least during the continuance of the symptoms they denote. It is scarcely necessary to say that we often examine the patient several times before an opportunity occurs of hearing them. The obstruction of the fistula or bronchia communicating with it makes them disappear. A certain proportion between the liquid and gaseous effusion is necessary for their production in a very distinct degree.

Agitation of the air, its passage through a narrow opening, and the resounding of the voice in a large cavity with firm walls, half solid and capable of vibrating with force, easily account for the metallic respiration and resonance. The explanation of the tinkling which I have given, seems probable enough.—pp. 61, 64.

On the subject of the metallic tinkling, Laennec, in the last edition of his book states, that 'it always originates in a morbid excavation within the chest, containing both a liquid and a gas.'

We have now travelled through the *elements* of pulmonary auscultation. In studying them, the greatest difficulties seem to us to be with the voice and speech; but even these are far from insuperable. They may be vanquished by any one who unites to an accurate ear, a tolerable degree of professional enterprise, judiciously directed. Having this conviction, we are sorry to be obliged to say, that most of the physicians of the United States remain, nearly, ignorant of the whole subject. In this city, where there are between thirty and forty practitioners, we are not aware, that more than two or three, are at all acquainted with the use of the stethoscope, and even doubt whether a majority of them have studied the theory of auscultation.

The close of the first part of Collin's manuel, consists of two short articles on the *mensuration* and *succussion* of the chest. The object of mensuration, is to ascertain the dilatation or contraction of one side of the chest. A piece of tape, or something flat and inelastic, should be passed round from the spinous processes to the centre of the sternum. Dilatation of the chest, is the consequence of serous or purulent effusion into the cavity of the pleura. Contraction, in the opinion of Laennec and Collin, is always the consequence of pleurisy. The following is the explanation offered by the former in his treatise on diseases of the chest:

> This morbid contraction of one of the thoracic cavities arises from a somewhat irregular termination of chronic pleurisy, or of the acute pleurisy become chronic. In these cases the sero-perulent effusion having continued for a long time, the false membranes which invest the pleura and lungs acquire a particular hardness, and an incipient organization, which render them incapable of being converted into cellular substance. When the effusion is absorbed, the lung long compressed by it, and further bound down by a strong false membrane completely investing it, cannot dilate itself sufficiently promptly to keep pace with the progress of the absorption: the ribs, consequently, contract, and the cavity of the chest is thus diminished. When the fluids are completely absorbed, the costal and pulmonary exudations come into close contact and finally unite, so as to form only one substance. The consistence of this becomes daily firmer, and, after a few months, acquires the consistence and all the other characters of a fibrous or fibro-cartilaginous membrane.—Laennec, p. 132.

By succussion, we can frequently detect the existence of a fluid in the sack of the pleura. The chest must receive 'one or more rapid abrupt shakes,' which need not be very violent. The sound is quite similar to that of shaking a bottle partly filled with water. In the opinion of Collin, there must be both gaseous and liquid effusions, in certain proportions, or succussion will afford no satisfactory result.

We come now to inquire into the practical application of the stethoscope in the diagnosis of pulmonary diseases, and pursuing the order already adopted, shall begin with those in which a morbid state of the respiration affords the principal indication. Our remarks, however, will not be limited to auscultation, although our great object is to ascertain and illustrate its value. Percussion, succussion, mensuration, and an examination of the thoracic movements, are auxiliary means of diagnosis; and in the opinion of Collin, their relative aid to auscultation, is generally in the order in which they are here enumerated.

1. *Pleurodynia.*—False pleurisy. Thoracic rheumatism? 'Percussion returns a dull sound,' and the 'respiratory murmur is weak in a greater or less extent, or wholly absent.'

2. *Bronchitis.*—Pulmonary catarrh. Percussion, mensuration, and succussion give but little information; it is far different with the stethoscope.

The signs it furnishes are truly pathognomic; they vary as the catarrh is dry or moist. In the dry catarrh we observe weakness, or even absence in the respiratory murmur in parts of the lung of greater or less extent; but these change every moment, and during the course of a short examination, may occupy different points in turn, so that the murmur may become distinct where it was absent, and absent where it had just before been clearly perceived.

This weakness of the respiratory murmur is very often accompanied with the dry, sonorous, or the sibilant rattles. The first, little variable; the second, very much so, disappearing for a longer or shorter time after the effort of coughing, or even without any evident cause; returning abruptly, assuming an increased intensity, or losing that which it had at first. Sometimes, however, both are constant, intense, and occupying the greatest part of the organ: the catarrh is then extensive and violent.

In the humid catarrh the same phenomena may exist, but they are then usually attended with a third, the mucous rattle; or this alone

is heard, and is sufficient to characterize the complaint. Less frequently varying its situation than the hissing rattle, the mucous rattle presents shades, either in force, frequency, or extent, which make known the different degrees of the catarrhal affection. Catarrh may be easily confounded with emphysema of the lung and pulmonary phthisis.—Collin, pp. 88, 89.

In croup, a resort to the stethoscope may enable us to decide whether the inflammation has extended from the larynx to the bronchia and air cells.

3. *Hæmoptysis.*—Pulmonary Apoplexy. In this malady, the chest during the first stage remains as sonorous as before the attack. Examined with the stethoscope, the respiratory murmur is altered.

The crepitating rattle develops itself in more or less numerous and circumscribed points of the lung. The spaces between these still present a perfect, and even puerile respiratory murmur.

At the end of a longer or shorter time it ceases to be heard; an abundant mucous rattle in large bubbles, succeeds to it, indicating a copious exhalation of blood into the air cells and bronchia, occupying very soon the whole lobe or affected lung, and the bloody expectoration soon confirms the diagnostic already pointed out by those phenomena.— pp. 90, 91.

4. *Œdema of the lungs.*—Anasarca pulmonum. It generally affects both lungs. Under percussion, the sound is natural or duller.

Respiratory murmur scarcely distinct, marked in almost the whole viscus, but chiefly in the back and inferior parts, by a sub-crepitating rattle, slight and energetic, but constant in its existence; the respiration sometimes puerile in a small extent of the upper part of the organ. Such are the symptoms of œdema of the lung.—pp. 91, 92.

5. *Emphysema of the lungs.* Sonorousness from percussion excessive in certain parts of the chest.

The murmur of respiration is very weak or wholly absent in all the points attacked by emphysema; a slight sibilant rattle similar to the clicking of a small valve, or a sonorous rattle imitating the cooing of a dove, is heard in deep inspirations, and sometimes also in expirations. The contrast of this greater resonance (or hollowness) of the thorax, with the diminution or absence of the murmur, forms a characteristic symptom of this disease. It is true that these characters of the respiration and the existence of the rattle are inconstant and variable; but they always remain a long time, and their changes are only momentaneous.

When the complaint is chronic and very extensive, another sign drawn from the mensuration may be added to those just enumerated, the dilatation of the side affected; and if the affection is on both sides, the almost cylindrical form of the chest projecting behind and before. Emphysema, sometimes distinguished with difficulty from pulmonary catarrh, may also be taken for a pneumothorax without liquid effusion.

Let us first explain how it differs from catarrh. In catarrh the suspension of the respiratory murmur is of short continuance in the same point; its return is sometimes marked by a strong and even puerile respiratory murmur; a frequent rattle attends it.

In emphysema, the suspension of respiration at the same point is longer, sometimes even permanent: when it ceases, the sound always remains more feeble, particularly if the complaint be ancient. The hissing rattle is rare, and badly characterized; the sonorous rattle, imitating the cooing of the dove, is constant, and almost never determined by a simple catarrh.

Besides, in this last affection, the movement of the sides is free; the respiration presents no constant inequality; the chest preserves its natural capacity and hollow sound. In emphysema, one side is often less moveable than the other; inspiration is always very short, relative to expiration; the chest dilates, and acquires a tympanitic resonance.

It is scarcely of use to say that percussion establishes at once the difference between emphysema and the other diseases of the chest in which respiration appears to the cylinder more feeble or absent: I only except pneumo-thorax.—pp. 93,—95.

6. *Pneumonia.*—Inflammation of the pulmonary tissue. In this very momentous affection, the stethoscope supplies us with much important information. In its several stages, the phenomena revealed by the cylinder, are different.

The respiratory murmur is feeble, in all parts where the sonorousness is diminished scarcely distinct, or sometimes covered by a crepitating rattle; at one time dull, at another sonorous enough, and the presence of which indicates both the nature of the alteration and the whole extent it occupies. The respiration then often becomes puerile in the other lung, and in all the parts of the effected lung yet remaining healthy.

These phenomena very soon change. If the disease terminates by resolution, the crepitating rattle diminishes in intensity every day; the murmur of respiration approaches more and more to the natural state; the movements of the chest resume their rhythm, their extent, and simultaneousness; the sound returns, and the mucous rattle, in a greater or less degree, indicates the change of expectoration.

On the contrary, if the lung passes to the state of hepatization, the alteration of the movements of the thorax continue, the sound becomes completely dull; the crepitating rattle ceases, but the respiratory murmur does not return; the smallest quantity of air cannot penetrate the hardened tissue of the lung. Respiration is wholly absent, or if heard, is so only in the vicinity of the large bronchial tubes; it is then tracheal, cavernous, and often very loud; the hollowness of the voice redoubles in all the affected parts; often in induration of the upper lobe even a true pectoriloquy begins to complicate the diagnosis, and throw doubts upon the nature of the affection. We must have recourse to the commemorative circumstances, to the general symptoms, to prevent our supposing the existence of pulmonary phthisis.

When the disease is of small extent, nature and art exert their powers, and are often at this period crowned with success; the disease retracing its steps by the same way it advanced, presents in turns and in inverse order the phenomena before observed. But if the complaint continue its progress—if the suppurative process seizes upon the pulmonary tissue, the movements of the chest become smaller and smaller, feeble and more difficult; to the first causes of their alteration general debility is added. The sound remains dull; a large bubble mucous rattle is first developed in insolated points, then in all the morbid part. It soon degenerates to the gurgling rattle; the pus collected in an abscess bursts into the surrounding bronchia; a communication is formed between these tubes and this accidental cavity, and pectoriloquy manifests itself, at first obscure, whatever may be the point the disease occupies.

We see from this abridged sketch, that each stage has very striking characters; and that if we have been called in at the commencement of the complaint, and have been able to follow the progress of the disease, step by step, it is easy to predict, in case of death, the extent and degree of lesion that will present itself. It is not so if we see the patient for the first time in the second state, when the lung is hepatized. In fact some ribs are immoveable, the sound is dull, the respiration absent; but those symptoms are common to empyema and hydro-thorax. Here the five modes of inquiry are insufficient, and we must seek for information in the amnestic signs and progress of the disease. Percussion and auscultation could not prevent an error always disagreeable, sometimes fatal.

In the third period, that of suppuration, it is difficult to guard against a mistake, less unpleasant indeed, but which may compromise the reputation of the physician.

The cavernous respiration, the gurgling, and pectoriloquy exist, and the general symptoms are nearly those of pulmonary phthisis.

As to the chronic pneumonia, after a vomica has formed and burst into the bronchia, we must apply to it what we have said of the second degree, that of hepatization, of the third, that of suppuration.

It remains to say what signs distinguish pneumonia from pleurodynia, from the first degree of pulmonary apoplexy, and from œdema of the lung. The crepitating rattle in the first state; the dull sound on percussion and perfect absence of respiratory murmur in the second; the dullness, mucous rattle, and pectoriloquy in the third stage, distinguish pneumonia from pleurodynia. In most cases percussion would prevent our confounding this disease with pulmonary apoplexy, if the examination of the movements of the chest did not already afford a good diagnostic difference. In fact, in pulmonary apoplexy the respiration is always complete; it is usually incomplete in pneumonia. The sound is always more or less obscure, often wholly absent, in the first stage of pneumonia when the crepitating rattle exists; it remains clear in the first stage of pulmonary apoplexy. The crepitating rattle is seldom widely spread in pneumonia; it is so usually in apoplexy. The mucous rattle suddenly succeeds the crepitating in the latter.

In pneumonia the absence of all respiratory murmur exists sometime between the moment in which the crepitating rattle ceases, and that in which the mucous commences.

It is the same with œdema of the lung.—pp. 96, 101.

We shall not insult our readers by an apology for this lengthened and most interesting extract. Pneumonia is not only a common and fatal, but too often a most insidious disease; and every thing which can throw light upon its diagnosis deserves the greatest attention.

7. Pleurisy. Empyema. Hydro-Thorax.—Some of our readers may perhaps, not see the propriety of uniting these affections into one article. This will be the case, with all those, (and the number is not small,) who are unapprized, that in every case of pleurisy, there is almost from the beginning, a serious effusion into the cavity of the inflamed pleura. In most of our current works on pathology and the practice, but little is said on this topic; the effusion which they recognize, being that of fibrin or coagulable lymph, agglutinating the pleura pulmonum with the pleura costalis. The researches of Lænnec on this subject constitute, in the language of his able translator, Dr. Forbes, an admirable piece of pathology. We earnestly recommend it to every reader, who would understand the morbid anatomy of the pleura. It is on the effusion to which we have referred, that the similarity of pleurisy, empyema and hydrothorax principally rests.

In the diagnosis of pleurisy, the stethoscope affords information which is truly pathognomonic; but other signs must be studied at the same time; and to enable such of our readers as may not possess the work of either Lænnec or Collin, to employ the stethoscope, successfully, in the diagnosis of this malady, we shall lay before them the whole that is said on this topic by the latter.

The signs afforded by the different modes in this disease, vary according to their being considered at the commencement, or after effusion has taken place.

In the commencement, that is before a serous or plastic liquid has been accumulated between the pleura and the lung, the movements of the thorax are enfeebled or almost wanting on the affected side. We have daily opportunities of observing that the ribs of the affected side alone are immoveable, while the others continue to move. Respiration is frequent, particularly if both sides are affected at once, quick in inspiration, interrupted, irregular. These characters continue during the whole acute stage of the complaint.

Percussion is painful, but gives the same results as in the sound state.

The respiratory murmur is enfeebled, but pure, if the disease be not complicated; the capacity of the chest is not augmented. Finally, the symptoms are as in pleurodine—a disease it is impossible to distinguish from the commencement of pleurisy, except by the general symptoms.

When the effusion has taken place, and is in small quantity, the resonance usually becomes obscure in the lateral and posterior inferior parts, or in any point of the thorax, if the disease be circumscribed and an anterior pleurisy has produced adhesions sufficient to confine the liquid.

The cylinder applied along the spinal edge of the scapula, towards its point or its outer edge, or in fine in any other place, even under the clavicles, according to the extent of the effusion, or the point it occupies, renders evident that sharp, tremulous, jerking voice, called by M. Laennec hægophony. The respiratory murmur is absent or scarcely distinct, in all that part in which the sonorousness is altered. It becomes sometimes puerile in the upper parts of the lung.

If the effusion is very considerable in the beginning, or becomes so in the progress of the affection, the sound becomes wholly flat, the hægophony disappears, the respiratory murmur is no longer audible, unless short adhesions retain parts of the lungs near the ribs, and prevent them feom being thrust back. The intercostal spaces widen, rise to the level of the ribs: these become flattened; the affec-

ted side enlarges, it becomes unfit for respiration, and its immoveability contrasts with the greater mobility of the opposite one on which side the respiration acquires the puerile character.

If absorption of the liquid takes place, hægophony reappears when the quantity is reduced to that necessary to the production of the phenomena: it then gradually diminishes as the quantity lessens, and finally disappears altogether when the absorption is completed. However, the sound still remains a long time flat, and the respiration absent or feeble; the ribs fall, the intercostal spaces sink, are effaced; the chest contracts, and that side never assumes either its former volume or mobility.

The resonance increases, and the respiratory murmur is heard with any force only when the pseudo-membranes have been converted into an organized tissue similar to cellular, membrane, fibro-cartilage or bone.

No disease can be confounded with pleurisy, so long as hægophony exists, except commencing hydro-thorax.

This phenomenon is always a pathognomonic sign of these two affections; the other local and general symptoms serve to distinguish them.

But when the effusion is copious and the disease chronic, if we have not attended to its progress, we may take pleurisy for a hydro-thorax or chronic pneumonia, and reciprocally these affections for a pleurisy.

The anamnestic signs and the general symptoms alone can establish the distinction; this is the more important, as little can be done for chronic pleurisy, while powerful and efficacious remedies remain for hydro-thorax and pneumonia. The operation for empyema is the only relief in chronic pleurisy, and would have more success without doubt if earlier performed.

However, the dilitation of the thorax, the perfect immobility of the ribs, seem to me not to exist in chronic pneumonia, and establish constant differences of character, unless the diseased side, having been before affected with contraction, has been incapable of enlarging.

As to the possibility of confounding chronic pleurisy and pulmonary phthisis, I think that even when there is not pectoriloquy, there are other characters sufficiently distinguishing to render this mistake hereafter impossible (*avoidable*, Ed.;) and even when they are complicated, it is often easy to distinguish them from each other.

The difference between pleurisy and pleurodyne is easily laid down. In pleurisy, when we observe the respiration incomplete, the resonance obscure, and the murmur absent or feeble, there will be hægophony at the same time; this phenomenon never exists in pleurodynia. If the effusion was copious enough to destroy the hægophony, there would be dilatation. Moreover, the error in any case cannot exist long.—101, 106.

Pneumo Thorax.—In this affection percussion raises a hollow tympanitic sound, while the Stethoscope detects no respiratory murmur, except near the root of the lung and there it is feeble. Thus the union of the two methods enables us to say that the case is not emphysema, in which the sound under percussion is not unnatural in degree, and the respiratory murmur scarcely ever entirely gone. The same union serves equally to distinguish this complaint from empyema and hydrothorax, for although the respiratory murmur is absent in all, the hollow sound under percussion is wanting in the latter. When there is a fistulous opening from the lung into the cavity of the pleura, there will be metallic respiration and metallic resonance. If the effusion is both liquid and gaseous, and a fistulous opening has been established, metallic tinkling will be superadded. In this case, moreover, percussion will afford no sound, if made exterior to the part in which the liquid is accumulated, while the sonorousness will be great in the parts above, which have the gaseous accumulation; and as these two fluids may change places, from an altered posture of the patient's body, it happens, that the same part of the chest at different times will sound differently under percussion.

9. Phthisis Pulmonalis. Tubercular consumption. With the people, and not a few of their medical advisers, every chronic disease attended with dyspnœa pain, cough, expectoration, and fever, is a consumption. But a great variety of læsions of the pulmonary organ may give rise to these symptoms. The principal are bronchitis, peripneumony, pleurisy, and phthisis—the anatomical characters of which are essentially different, whatever identity superficial observation may admit in their symptoms. To the study of this morbid anatomy, Lænnec devoted himself with a degree of success, that must render his work a durable monument of genius and industry. To have made dissections, and published descriptions the most accurate, would have been of little value, unless a connection had been established between the symptoms during life, and the morbid appearances after death. Of this

important truth, so little regarded by Lieutaud and many other writers on morbid anatomy, our author was so well aware, that its influence is impressed on every page of his admirable work.

So long as the symptoms just enumerated, and these only, were placed by the anatomical pathologists, in connexion with the læsions of structure revealed by dissections, all was confusion and uncertainty. Those symptoms, being common to most pulmonary disorders, have, indeed, a generic character, and are almost equally connected with every species of pulmonic derangement. It was reserved for Lænnec to institute a new system of semeiology, and to show that each læsion is indicated by special signs. Thus the mucous rattle is in some degree pathognomonic of bronchitis, and ægophonism of pleurisy. Knowing this, we are led to ask whether the same means of diagnosis can be made to establish the existence of tubercular phthisis? We answer yes,—but not while the disease is yet, in its early stages. When a tubercle, or cluster of tubercles, has softened and been expectorated, a cavity is left, for there is no reproduction of the pulmonary tissue. In this cavity we perceive by the aid of the stethoscope, that resonance of the articulated voice of the patient, to which the name pectoriloquy is applied; and hence that phenomenon is pathognomic of tubercular, or, in common parlance, genuine consumption.

To understand this subject properly, the student should read with attention the two chapters of Læennec which treat of pulmonary phthisis; meanwhile we shall present him with a condensed account by Collin, recommending it to the serious attention of every practitioner who is ambitious to answer correctly the oft repeated and momentous question—is this a case of true and incurable consumption?

To lay down the semeiology of pulmonary phthisis the more clearly, we shall admit it to have three stages, although this complaint is seldom constant in its duration, and so obscure in its progress as rarely to favor this division.

The first of those periods, that in which an inconsiderable number of tubercles are developed in the lung, presents on examining

the local phenomena and the general symptoms, only the appearance of a catarrh of greater or less severity; it is sometimes concealed from observation and does not seem to exist.

In the second stage, the tubercles are already in sufficient numbers to stifle, as we may say, the tissue of the organ in those places where they are most frequently observed to accumulate and give rise to phenomena, insufficient to enable us to say with certainty that the disease exists, but enough to make us suspect it.

Finally, in the third, the melting, the softening, and evacuation of the tubercles, gives place to a phenomenon which is always a certain sign of this affection and the shades of which point out its extent and its intensity.

The change in the movement of the thorax are extremely variable in this tedious and melancholy complaint. They may be all met with during its progress, but are never of great use in the diagnosis.

In the second stage, the upper part of one side of the chest frequently returns a flatter and more obscure sound than natural, on percussion. The Stethoscope applied to this spot makes known a feebleness, or even complete absence of the respiratory murmur, generally in an extent rather limited; the voice resounds with more force under the instrument; but these symptoms only become signs of the complaint when they exist on one side alone, and are constant; it is only the comparison between the healthy and the diseased side which shows their value.

The sound on percussion very soon returns, and sometimes acquires even more intensity, or it loses still more of its distinctness, and from being obscure as before, becomes quite dull.

Pectoriloquy becomes at first doubtful, but does not delay long to acquire its greatest perfection, and ends by being again only imperfect, if the disease, continuing its progress, produces vast excavations. The phenomena produced by the catarrh are extended and aggravated from day to day, and continue to the moment of death.

If in all cases those two very striking periods, and this succession of phenomena existed, phthisis would cease to be a disease so often difficult to recognize; but how frequently does it not happen, that patients fall before the softening and evacuation of the tubercles, even before their accumulation has altered the sonorousness of the chest, or injured the perfection of respiration.

The melancholy information acquired by the cylinder is certainly precious; but in most cases the disease is beyond the reach of art when it is discovered.

Chronic pulmonary catarrh must then be always confounded with phthisis, so long as pectoriliquy, or the three phenomena mentioned as signs of the accumulation of tubercles, do not exist.*

Phthisis will also be confounded with acute or chronic pneumonia, occupying the upper lobe of the lung; the distinguishing charac-

* The chief diagnostic symptom is the rattle which attends the catarrh.–Transl.

ters can only be found in the general symptoms and the appearance of the expectoration; and these are but little to be trusted to.

It will more rarely resemble emphysema of the lung, and percussion and the general symtoms will easily distinguish them.

The dilatation of the bronchia, a common consequence of long-continued pulmonary catarrh, gives rise also to the phenomena of pectoriloquy. It is then impossible to avoid a mistake; time alone, and the progress of the disease, sometimes deceive us.—pp. 106, 110.

With this extract we close our present notice of the Stethoscope in diseases of the lungs; in our next number we shall enquire into its nature as an instrument of diagnosis in maladies of the heart.

Convinced as we are of its importance, we cannot refrain from urging upon such of our readers, by far the greater number, as have not yet given it a trial, the *duty* of doing so. It is an undeniable fact, that we every day see patients struggling through the successive stages of mortal diseases of the thoracic viscera, and consigned to the grave, without our knowing or being able to say more, than that they have a *decline*, or a complaint of the heart. We even venture to assert, that many a patient has been suffered to die of pulmonary disease, without having been subjected either to thoracic pressure, succussion, admeasurement, percussion, or the stethoscope—omissions not less prejudicial to the sick, than derogatory to the character of the profession. Let not the difficulties attendant on these clinical processes, deter any one from attempting to practise them. None of them require more time and study, than many other operations, for the performance of which the most unambitious member of the profession, would be ashamed to remain unprepared. But many profess to be incredulous as, to the information which percussion and auscultation can impart. Of such we may justly say, that they have no right—because they are not qualified—to judge, until they have made themselves *familiar* with the application of the hand and the stethoscope, both to the sound and the unsound thorax. If they *then* reject these measures of diagnosis, their testimony may be allowed its due weight. We are persuaded, however, that they will be too

well satisfied with the results of their experience, to appear in opposition. It cannot be long, before they must meet with cases, that will afford them a gratification not unlike that which we have lately experienced from the following. A medical gentleman, of Tennesee, requested us to investigate his situation. He laboured under fever, strongly inclining to a hectic character, with cough, expectoration, and considerable emaciation. In short, he exhibited strong, *prima facie*, evidence, of a serious pulmonary læsion. On examining his chest, however, we were a good deal staggered. He not only bore thoracic pressure well, but it actually afforded him agreeable sensations; under percussion every spot emitted a hollow sound; the respiratory murmur could be heard in all parts; there was no rattle, no metallic tinkling, no ægophony, no pectoriloquism, and only that degree of broncophony, in the posterior and upper parts of the chest, which can be heard in most emaciated persons. From these observations, according to the new system of diagnosis, I was required to believe his lungs sound, although the signs of some kind of læsion were apparently unequivocal. At my next visit every difficulty was vanquished, by his informing me, that from the beginning, his larynx and trachea had been affected with tenderness, and a discharge of sputa. In fact, he laboured under a real trachitis, with cough and fever; and hence his lungs, when subjected to percussion and auscultation, gave no evidence of disordered structure. On the whole we believe that an experienced auscultator, may detect most of the organic changes to which the lungs are liable.

On this point there can be no difference of opinion among those who practice auscultation. There is however, some ground, on which to raise a doubt concerning the utility of this kind of diagnostic knowledge when acquired.

1. It relates to derangements of structure consequent upon disorders of function, which are not, in general, cognizable by the cylinder, and in most cases the organic læsions are irremediable.

2. Inflammation, either acute or chronic, is the morbid action which generates these structural derangements; and inflam-

mation, in whatever tissue it may be located, generally requires the same *methodus medendi*; it would not, therefore, seem to be important, to know whether a pulmonary inflammation was seated in the mucous membrane, the serous membrane, or the intervening cellular tissue, or whether that tissue was becoming hepatized or tubercular.

Allowing to the whole of these arguments, what, in terms not very definite, we shall call a reasonable importance, we find nothing in them to justify a neglect of the measures which may lead to a correct diagnosis. Every kind of pathological knowledge must sooner or later, in some way or other, be useful in practice; but it is not true, that the stethoscope gives no *early* indication of organic changes. In the first stages of bronchitis and pleurisy, and while hæmoptysis or pulmonary apoplexy, is yet in its forming stage, the stethoscope *may* clear up many of our doubts; and impart a character of accuracy and science to our opinions, equally calculated to win the confidence of the sick, and advance the dignity of the profession. Is it a fact, however, that the result can in no degree be influenced by a knowledge of the tissue affected? We do not think it is. Every tissue has its proper functions, its appropriate sensibilities, and peculiar sympathies; and when inflamed, while certain things, required by all the phlegmasiæ, must be made the basis of our treatment, others, especially adapted to each variety, are not to be neglected. Thus in chronic pleurisy, cupping is a valuable remedy, while colchicum and balsam copaiva are useful medicines in bronchitis, and these methods are not convertible; in chronic pneumony the antiphlogistic treatment may arrest the progress of hepatization, but would be fruitless or prejudicial, if the lungs were tuberculated; in empyema, if the purulent collection should remain undiscovered, it might at length break into the bronchial ramifications and prove fatal, while, if the pus had been evacuated by paracentesis at an early period, the patient would have recovered. Other examples might be cited; but we shall submit the subject to the good sense of our readers, whose experiments and observations, we shall take great pleasure in presenting to the public.

ART. IX—*A Manual of Practical Obstetrics: arranged so as to afford a concise and accurate description of the Management of Preternatural Labours; preceded by an account of the Mechanism of Natural Labour. From the French of Julius Hatin, Doctor of Medicine of the Faculty of Paris, Professor of Obstetrics and of the Diseases of Women and Children, &c. &c. By S. D. Gross, M. D. Philadelphia: Grigg*, 1828. *pp.* 166.

[From a Correspondent]

THE author sets out with a judicious definition of preternatural labour, and the object of the practitioner in the management of it, which is to be attained by one of the three means of the *hands*, *blunt* instruments, or *sharp*. The use of the two former, indicated when the maternal parts are well formed, but the dimensions or positions of the fœtal presentations cause the obstacle; thelatter, by implication, although not expressed, solely when the pelvis or other parts of the mother, are deformed. In conclusion of his introductory remarks, he very properly inculcates on the young practitioner, the necessity of a thorough and minute acquaintance with the mechanism of natural labour.

PART 1st. Treats, in a manner not essentially different from that of other approved authors, 1st OF THE PELVIS OF THE MOTHER, under the divisions of *Anterior*, *Posterior*, and *Lateral regions*. 2nd. Of the PRINCIPAL PARTS OF THE FŒTUS, inducing the *motions of its head on the trunk*. 3d. ON THE MECHANISM OF NATURAL LABOUR, in which the Fœtus may present the *head*, *feet*, *knees*, or *breech*. Proceeding, in the order of the presenting parts just mentioned, he gives a circumstantial view of the *four* different modes of presentation of each.

PART 2. Comprehends THE MANAGEMENT OF PRETERNATURAL LABOURS, the FIRST SECTION of which includes, LABOURS WHICH TERMINATE BY MERE MANUAL ASSISTANCE, with *the general causes which induce the practitioner to act;* these are, either on the part of the *mother*, or on the part of the *infant*. It includes also directions respecting *the position of the woman;* and

for introducing the hand. The limited character of the work, may account for the paucity of conveniences recommended, preparatory to operation; but the *position of the patient, on the back,* is preferred, in which he coincides with professor Dewees, whose reasons for adopting this position are conclusive.

In the author's *rules for introducing the hand,* after the indispensable *lubrication* of it, and *conical* form, he recommends, that, "in introducing the hand, it should be strongly *pronated.*" If, in this position, it gives "least pain," and presents "the least possible volume" relatively, there is certainly great propriety in the direction; it is however questionable; because the *supination* of the hand would seem best adapted to the curvature of the vaginal parts, and the pain occasioned by "bringing it to that state," after the introduction, would be avoided.

The time of, *first,* introducing the hand into the vagina, and, *secondly,* "penetrating the os tincæ," is judiciously distinguished; the practitioner notwithstanding, might have derived benefit from some instruction relative to the *relaxed* state of the *os tincæ* at the time of "penetrating" it, since the effort should never be made, until relaxation has been effected, either by the labour pains, or by venesection, opium, injections, &c. the precaution of fixing the uterus by gentle pressure of its fundus, is very properly recommended.

PRESENTATIONS OF THE FEET, are described as principally *four,* which, like those of the head, correspond to the oblique diameters of the pelvis, and are detailed according to Baudeloque. *The characteristics of the feet* are well defined, and *general rules for introducing the hand,* given, in each of the four presentations. With respect to the umbilical cord, which, under some circumstances, for want of necessary relaxation, is required to be *cut,* the author, in imitation of Baudeloque, omits the *ligature,* but it is probably safest, in conformity with the practice of Dewees, to use it. Too much attention cannot be given to the experienced author's circumstantial directions for effecting the delivery of the successive parts of the Fœtus.

PRESENTATION OF THE KNEES, also four, their *characteristic marks described* with sufficient distinctness. The man-

agement not being the same in both straits, he therefore distinguishes between the presentations of the *inferior*, and those of the *superior*, giving general rules for the application of the fillet, which for obvious reasons he perfers to the blunt hook. The management in the various presentations of the knees, claims the studious application of the young practitioner, being evidently predicated on much experience.

Next in order are *the presentations of the breech*, in number corresponding with those of the feet, of which minute descriptions are given, in relation both to the *superior* and *inferior* straits; and rules for the application of the *blunt hook* and fillet. In all these the author displays great systematic precision in the management of the labours, under every conceivable circumstance.

Presentations of the Vertex of the Head, are next treated of, in their four principal positions, both at the superior and inferior straits; also *the characteristic marks of the head*, and the management applicable to its respective presentations. When freeing the superior strait, by pushing the head towards one of the iliac fossæ, he aids the bringing down of the feet, by "*inclining the uterus firmly to the opposite side.*" The *choice of the hand*, in search of the feet, is governed by the side along which it is directed: the hand must invariably correspond by *name* to the *side*, in diagonal presentations. In those direct, either hand may be introduced. The rule laid down by professor Dewees, being more simple, is preferable, namely, the *palm* of the hand employed, should *always* look towards the *face* of the child."

The author proceeds, in order, with Presentations of the Knees, in treating of which, he is, perhaps, too elaborate.—The same evidences, however, of research, and experience, are to be met with in this department of the work. The directions, in relation to the presentation of the *hand*, are brief and judicious.

A recapitulation of the different managements, in each of the presentations, is uniformly given. This first section ends with a synopsis of *Compound Labour*.

Under the SECOND SECTION, of preternatural labours, the author places the INSTRUMENTAL, in which he gives *general rules for the application of the forceps, lever,* and *blunt hook.* The forceps of *Baudeloque* seem preferred, and, doubtless, are calculated entirely to supercede the shorter, or *Haighton's.*

With his characteristic perspicuity, the author describes every variety of presentation of the head, requiring the use of the forceps.

Next, IMPACTION of the head, both in its *occipitofrontal,* and in its *bi-parietal diameter,* with their relative presentations, indications, and management, occupies a considerable portion of this very interesting manual, followed, as usual, by a recapitulation.

SECTION THIRD, embraces *labours which may be terminated by the use of cutting instruments; the particular causes of these kinds of labour,* and the description and use of the *Perforator and Crotchet;* and of the rest, both in relation to the *infant* and the *mother;* are treated of. It is to be regretted, that *Symphysiotomy,* should have found place in this manual, an operation, the advantages of which can never compensate for its performance. Indeed the author's sentiments, if duly weighed, go greatly to the discouragement of it. He observes, "*In summing up the results, it will appear, that symphysiotomy is a serious operation, and that it should be performed only in those instances, where the necessity of the case absolutely demands it*"—which, we are disposed to believe, *never* happen.

To the CAESARIAN OPERATION, although hazardous, no reasonable objection can be made. The author adopts, in conformity with Mauriceau, Platner, Solayres, and others, the *incision upon the linea alba;* and is not wanting in the necessary instructions, in relation to the *instrument; the proper time for performing the operation; the preliminary measures; position of the patient; position of the assistants; operation itself;* and *treatment* afterwards. His summary of the results of this operation, has nothing in it, which ought to deter from, but every thing to recommend, and demand it.

GASTROTOMY is next defined, as the operation sometimes necessary, in consequence of *rupture* of the *uterus,* and *extrau-*

terine pregnancies, the *characteristic signs* of which are briefly given; to those of rupture of the uterus, might be added, a *detrusion*, *wrinkling*, and *coldness* of the *vaginal coat*, which we have, in one instance, observed. The *instruments*, *place of incision*, *time of operation*, the *operation* itself, and *treatment afterwards*; are comprehensively noted.

Sec. Fourth treats of the *artificial delivery of the secundines*. In this section, the author appears to be rather vague and unsatisfactory. Much judgment is sometimes required for the successful management of the placenta. We would take the liberty to refer the student or young practitioner, for necessary information, to professor Dewees's *System of Midwifery*.

On the whole, our profession is much indebted, both to the learned author, and to the translator, of the "*Manual of Practical Obstetrics*," which, we confidently hope, will be in the hands of all, who devote themselves to this important branch of science. E. A. A.

Art. X. *Transactions of the Medical Society of the State of New York, for the year* 1829, *with the annual Address by* T. Romeyn Beck, M. D. *President of the Society. Albany*, 1829.

For several years the Medical Society of the state of New-York has published a report of its transactions. We have, at different times, taken pleasure in looking over these little annuals. They all, it is true, contain much that is merely local; but even this cannot be read without interest, for it proves that the physicians and surgeons of that great and populous state, are commendably labouring to organize themselves into a Profession, an example worthy of general imitation.

Among the subjects of a general nature which occupied the attention of the society, at its late session, we shall notice a few of the most prominent. These are chiefly embraced in a communication from the medical society of the city of New-York, and were submitted for the consideration of the state society.

The first of these is VACCINATION. In their communication, the committee of the district society, express themselves, in the following terms, on the causes which have led to a suspicion of the prophylactic power of vaccination.

The failures of vaccination affording protection against small pox, may be readily accounted for from the following circumstances:

1st. From the operation being performed at an improper time, as, when the child is teething or laboring under cutaneous or other diseases.

2dly. From the use of impure virus.

3dly. From peculiarity of temperament, which is not susceptible of full impression from a single insertion, but requires a second or third inoculation.

The committee then go on to recommend the establishment of a state vaccine institution, to be located in the city of New-York, and the general society concurs in the propriety of such a measure.

The city society also recommends to the state institution, to exert all its energies against the increasing and deplorable evil of INTEMPERANCE, remarking that—

It becomes the profession of medicine, whose members are so much better able to judge of the numerous instances of impaired health and premature dissolution, from the free use of ardent spirits, to proffer their efforts in discouraging so alarming and destructive an evil.

On which the state society remarked, that its attention had already been directed upon that pernicious vice.

Both societies united in the opinion, that from the increasing number of venders of medicines, called APOTHECARIES, in our cities and populous towns, and from the numerous, even fatal errors, that have arisen from the ignorance of many of them, some legislative interference is required. In this opinion we most heartily concur; being convinced that not a few of those who compound and sell medicines, are entirely unqualified for such a delicate and responsible duty. Many of them, indeed, are grossly illiterate and utterly unacquainted with the first principles of pharmaceutic chemistry.

The last subject pressed upon the state institution, by the county society, is the STEAM-DOCTORING system of one Thompson; which seems to have spread like a poisonous exhalation over the state of New-York, and even extended itself into the West, as we announced in a former number of this journal. We have not seen a more impudent, artful, and mischievous system of quackery; and, although for a long time unwilling to admit that it was in any degree worthy of the notice, or even the contempt of the profession, we have been compelled to descend from that dignified position, and acknowledge, that it exerts a sway over the minds of the multitude, that calls for the interposition of the intelligent portion of society. The annual number of its victims in New-England, New-York, Ohio, Indiana and Kentucky, is, we have no doubt, much greater than all who have died of Hydrophobia since the days of Hippocrates, and yet the man who should discover a remedy for that disease, would be ranked with the immortal Jenner.

With the laudable design of promoting discoveries and improvements in the profession, the society offers a premium of fifty dollars for the best dissertation on each of the following subjects:

1. *The history, preparation and medical uses of Iodine.*
2. *The nature, symptoms, causes and treatment of delirium tremens, illustrated by cases.*

The dissertations, we presume, to be sent in before the meeting of the society, in 1830.

To the transactoins of the society is appended the address of Dr. Beck, the president, which like every thing else from the pen of that very respectable writer, bears the impress of strong common sense, varied attainment and liberal feeling. His object, on this occasion, was to prove, that the profession is on the advance; that a sounder spirit of philosophical inquiry pervades it, than in past times; and that a more assiduous cultivation of morbid anatomy and some of the sciences collateral to medicine, has of late conducted us to many valuable improvements in pathology and therapeutics.

The following paragraph on some of the benefits which accrue to science from the efforts to overthrow and defend, the theories and opinions of eminent men, will serve to show, that the President was by no means unqualified for the task which he imposed upon himself, and with it we shall close our observations:

A subsidiary but important advantage has also accrued from the successive promulgation of these theories. The disciple, animated with an enthusiastic belief in the doctrines of his preceptor; warmed by the eloquence of his prelections, or excited by the attacks of his opponents, applies himself to the invention of new arguments, or the detection of fallacious objections. In such a contest, with much that is superfluous, and often something that is offensive, additional facts are notwithstanding elicited, and the value of old ones is better understood and more correctly applied. A rapid accumulation is thus produced, of the mass of knowledge, for which otherwise, years of desultory effort would have been necessary.—pp. 5–6.

ART. XI.—*An Act to incorporate Medical Societies for the purpose of regulating the Practice of Physic and Surgery in Ohio. Together with the proceedings of the General Medical Society. Columbus:* 1829.

In the different states of our *imperium in imperio*, a very different policy prevails, in relation to the medical profession. In some of them, as our neighbour, Kentucky, no legislative enactments on the subject have yet appeared; while in others it has been a point of policy to unite the whole body of medical practitioners, into one corporation. This is the case in Ohio, where successive laws for this purpose have been enacted, during a period of nearly 20 years. Unfortunately for the object in view, these laws have superseded each other, before any one of them, had been in operation for a sufficient length of time, to afford the means of judging of its excellence or its defects. The present act has, however, been suffered to remain since 1824.

By this statute the state is divided into twenty odd medical districts, the physicians in each of which, constitute an independent corporation or society. By this act it was ordered, that each district society, should in 1827, elect one delegate, to a

convention, to be holden at Columbus, in January 1828; which convention should have power to form a general or state medical society, to be composed of a member from each district. The convention met, and its principal act was the formation of a constitution for such a society; which was ordered to assemble at Columbus, on the 5th of Janury 1829. The meeting accordingly took place:—present, Drs. Bush, Dunlavy, Martin, Coleman, Smith, Manning, Pinkerton, Parsons, Cotton, M'Neill, Flanner, Dickson, Bissel, Wright, Hawley, Brice, and Thompson.

By the statute of the state, this confederate body, denominated the 'General Medical Society of the State of Ohio,' is a body corporate and politic, and possesses a visitorial power over all the district societies; may increase their number or alter their geographical boundaries; and prescribe uniform rules and regulations for their government.

We have read the proceedings of this respectable society, but as might be expected of its first meeting, we find nothing of sufficient *general* interest to transfer to a journal, the principal circulation of which is in other states. They relate chiefly to its own organization, and the duties, objects, and limits of the district societies.

Several subjects of importance were, however, broached by the society, and will undoubtedly receive the grave attention of that body, at its future sessions, which are to be held biennially. Among these we may mention vaccination, a uniform course of medical studies, and the substitution of one or more boards of censors or examiners, to meet annually, for the present system of district censors. Many other subjects, will, no doubt, present themselves for the consideration, of the society hereafter; and we cherish the hope, that its exertions will be skilfully and unremittingly directed to the elevation of the medical character of the state.

The officers of the society are—

Dr. John Cotton, *President.*
" John C. Dunlavy, *Vice President.*
" John E. Bush, *Recording Secretary.*
" Benjamin Dickson, *Corresponding Secretary.*
" Samuel Parsons, *Treasurer.*

MISCELLANEOUS INTELLIGENCE.

ANALECTIC, ANALYTICAL, AND ORIGINAL.

I. Analectic.

1. *Amputation of the neck of the Uterus.**—As operations on the uterus appear to be growing very fashionable, perhaps it would be useful to give some account of the mode of proceeding adopted by Lisfranc.

The patient was a woman 49 years of age, and the operation performed on the 4th of July, in the following manner. The neck of the uterus being too much enlarged to allow of its being seized at the bottom of the vagina, it was necessary to draw it down to the orificium externum, in order to determine the limits of the disease. This preparatory step was, however, very difficult, in consequence of the tumour being fungous and softened, whilst there only existed a kind of band above, where the tissue of the organ was so firm as to admit of the necessary traction. This difficulty was surmounted by M. Lisfranc introducing the fore-finger of the left hand so deeply, that its point passed the limits of the fungus, and then carrying forwards upon it a hook, (*une aizique*) guarded by lying with its flat side on the finger. Having reached the sound part of the uterus, the hook was turned round and impacted in its substance, by pressure with the end of the finger. Many other hooks were introduced in the same manner, and the diseased mass drawn down, by their means, to the labia externa, when a pair of forceps, (pince de museux) was applied, and several of the hooks were withdrawn. The tumour being retained in this position by assistants, the operator proceeded to ascertain the exact limits of the disease, and the point of attachment of the membrane of the vagina, rather by means of the finger than the eye. The labia were then separated as widely as possible, and the band of sound parts cut across by a bistoury with a very concave cutting edge, the section being made from behind towards the front, and care being taken to prevent any obliquity.

These were the principal features of the operation, which we give for the sake of recording the *how*, and not of discussing the *why*. The most difficult and embarrassing part of the proceeding, was getting the tumour to the mouth of the vagina, a difficulty that is sometimes completely insuperable. In a case of polypus uteri at St. George's, under the care of Mr. Brodie, the body was so large

*La Clinique.

that the efforts to draw it down were ineffectual, and in consequence abandoned. In a case which occurred to M. Dupuytren, the traction was also ineffectual, until the perineum was divided! In the case of Mr. Brodie's to which we have alluded, the operation was concluded by throwing a ligature, by means of the double canula, round the neck of the polypus, in situ. The ligature was tightened de die in diem, and the tumour sloughed off at the end of a week. The operation was accomplished in a very few minutes, occasioned but trifling pain, and produced no subsequent inconvenience whatever.

Med. Chir. Rev. Oct. 1828.

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2. *On the treatment of Cancerous Affections of the Cervix Uteri, and especially on amputation of that part, by* M. Lisfranc; *reported by* M. Avenil.—In a late number of our Parisian contemporary, [The Revue Medicale] there is a long Memoir on this important subject, and ten cases are detailed of this formidable operation. We shall, as usual, greatly compress the matter of the Memoir before us.

M. Lisfranc commences with some observations on the accidents which may or do supervene on the operation of excision. The first of these is hæmorrhage. This accident, he thinks is too much dreaded by surgeons, and the pluggings of the vagina to which they have recourse for its suppression, leads to inflammation and worse consequences than the hæmorrhage. On these accounts, he always permits a copious flow of blood from the excised parts.

"When a woman has not been exhausted by preceding bleedings—when she is not extremely weak—when the hæmorrhage does not appear to proceed from large vessels, but, on the contrary, is so slow that there is not more than twelve or fourteen ounces lost in the first two or three hours—then the hæmorrhage should not cause any alarm in the surgeon's mind—nor should the process of plugging the vagina be employed."

M. Lisfranc here describes a series of phenomena which take place when a clot of blood forms in the passage, and produces the same effects as plugging. Among these are, pain in the loins, epigastrium, and region of the uterus, sense of distension, hiccup, nausea, vomiting. When this last occurs, the clot is generally driven away, and all the symptoms are immediately relieved. When the above-mentioned phenomena, however, continue without this natural relief, M. Lisfranc introduces his fore-finger, breaks away the coagulum, and re-excites the hæmorrhage, when the strength of the pulse, and the state of the patient appear to warrant the renewed loss. When the mechanical removal of the clot does not re-produce the hæmorrhage, he throws up warm water, which generally has the desired effect. After the storm has ceased, it often happens, that two or three times in the course of the day, sickness and vomiting recur. On this account, the patients in La Pitie are always operated on at 9 o'clock in the morning, and all the troublesome symptons are usually over by five or six in the afternoon. When the spontaneous or artificially excited hæmorrhage does not relieve the symptoms, M.

Lisfranc prefers bleeding from the arm to leeching the groins or labia. He thinks the former acts more beneficially than the latter. Low diet, diluents, lavements, emollient fomentations, &c. are had recourse to, as auxiliaries, if the foregoing measures fail. Generally a most delightful calm succeeds the first effects of the operation. The dreadful disease removed, the patient tastes a refreshing sleep the first night, to which she had been long a stranger. There is a marked change in the MORALE as well as in the PHYSIQUE. Her gaiety is renewed, and her gratitude to the man who has delivered her from such torments, is expressed with unbounded energy. A complete convalescence is often observed in two or three days after the operation. But great care, absolute repose, and low diet, should be insisted on for eight or ten days, even where no bad symptom appears.

In two cases, where nothing particular occurred during the first two or three days, and where there was no appearance of hysteritis or peritonitis, nor any sign of them on dissection, the patients were suddenly seized with pain in the head, dizziness, weakness, and quickness of pulse, great prostration of strength—death. In these cases M. Lisfranc asks, if the fatal issue did not depend on the absorption of cancerous or poisonous matter from the wound, as there was nothing, on dissection, to account for their death?

When the cicatrization of the wound does not proceed in a favorable manner, M. Lisfranc employs injections containing solutions of the chloride of soda, weak at first, and gradually increased in strength. If this fails, and fungous excrescences are detected on the surface of the wound, he employs the cautery. The medium period required for cicatrization, is six weeks or two months. Great attention should be paid to the general health for a long time after recovery.

CASES.—*Case* 1. Constantia Franck, aged 33 years, became affected with pains in the uterine region, after great mental anxiety and reverses of fortune. Towards the close of 1826, she left Brussels, and came to Paris to consult M. Lisfranc. He detected an incipient cancer of the cervix uteri; and some ulcerations had already taken place around the os uteri. The pains were lancinating and constant, with fetid excoriating discharge. Two months of antiphlogistic measures produced no amelioration of the symptoms, and she entered LA PITIE to undergo the operation, on the 3d of January 1827. Three weeks had elapsed since the last consultation, and the disease was found to have made progress. The operation was performed according to M. Lisfranc's usual method (already described in this Journal) and the patient suffered little. In one hour after the operation, the hæmorrhage became very abundant. M. Lisfranc sat by the bed-side, and did not plug the vagina. In two hours, the bleeding lessened, and a clot formed. Colicky pains next occurred, and a fit of vomiting expelled the clot. The pains immediately ceased. A slight syncope supervened, but the pulse

did not sink much, and the plugging was avoided. In the same evening there were symptoms of excitement that rose into strong re-action, requiring venesection to six ounces. We need not pursue the diurnal details. The nitrate of silver was applied on the 29th of January. On the 24th the patient left the hospital cured.

Case 2. Ellen Loos, aged 30, the mother of six children, became affected, after two abortions, with lancinating pains towards the groins, loins, thighs, and region of the uterus. The menses got irregular, and, for nine months previous to her entrance into La Pitie, she had considerable discharge from the vagina. Her mother died of cancer of the uterus. The patient entered the hospital on the 20th January, 1827. She had had 300 leeches applied in the course of three months at two other hospitals. On examination, the cervix uteri presented considerable tumefaction, and deep ulcerations, from which a fetid sanious pus issued. The operation was deemed indispensible, and was performed on the 23d of the same month. The uterus in this case could not be drawn as low down as usual, although it was in a state of slight prolapsus. Five lines in depth of the cervix uteri was removed. Considerable hæmorrhage ensued, and most of the symptoms described in the preamble of this paper. But the patient ultimately did well, and by the 18th of March the cure was complete.

Case 3. Augustine Conder, aged 25, became affected with lancinating pains in the uterine region shortly after an abortion, which she had experienced eight months before she entered the hospital, which was on the 15th February, 1827. The cervix uteri presented a large ulceration, especially on the anterior lip of the os uteri, with reverted edges, and an indurated state of the neighboring parts. The uterus itself was double its natural size. The operation was performed on the 19th, and offered nothing worthy of remark. Very little pain was experienced while the cervix was incised—the whole of the deceased part was removed—and there was scarcely any blood lost. Some smart hæmorrhages afterwards supervened, but they did not require the plug. There were considerable pains, and symptoms of constitutional disturbance in the course of the first few days, requiring several bleedings, and all the usual antiphlogistic measures. On the 1st of March the menses appeared, and flowed for two days, and on the 14th of the same month, she left the hospital completely cured.

Case 4. Harriet Cuiret, aged 22, had never borne children. Had experienced, for more than a year, lancinating pains in the region of the uterus, with an abundant leucorrhœa. The menses became irregular, and for the three preceding months, had scarcely been seen. She entered La Pitie on the 30th of January, 1827, for another complaint, during the cure of which she disclosed the more important malady. The cervix uteri was found to be tumefied, indurated, profoundly ulcerated. The operation was performed on the 6th of March, as M. Lisfranc was of opinion there was no time

to lose. There was great difficulty experienced in the resection, on account of the narrowness of the parts. The surgeon was obliged to use considerable force in separating the parietes of the vagina, and perform the section of the cervix in the interior of the vulvo-uterine canal. There was little blood lost at the time; but great hæmorrhage succeeded, and was arrested by syncope, and the formation of a clot. The clot was afterwards expelled by vomiting—and these formations and expulsions were four or five times reiterated alternately. In one of these hæmorrhages there was a loss of more than 20 ounces from the wound. On the 7th April a copious menstruation took place; and on the 11th of the same month, she was seized with an intermittent fever, which ceded to the quinine. On the 27th July she was discharged perfectly cured.

Case 5. Claudine Deschampts, aged 35, was delivered safely of a child in December, 1826, soon after which the menses were suddenly suppressed by a violent mental emotion. Uterine pains, of a lancinating character next succeeded, and, on the 6th March, 1827, she entered La Pitie. Large vegetations were discovered on the cervix uteri, and similar excrescences were seen about the verge of the anus. M. Lisfranc thought them venereal, and prescribed mercury, under the influence of which, the external vegetations completely disappeared; but the others continued unaltered. The cervix uteri now became tumefied, indurated, and, in fact, the malady made such progress, that M. Lisfranc decided on an operation. It was performed on the 28th May, at nine in the morning. The hæmorrhage was trifling till she was carried to bed, when it became considerable, and syncope was twice imminent, accompanied by chills. A large clot formed in the vagina. At eleven o'clock that night, nausea, hiccup, vomitings came on, and the clot was instantly expelled; when all the foregoing symptoms ceased. They again recurred on the formation of a clot, and again the clot was expelled. There were some difficulties in the management of the case, but they were overcome; and, on the 30th June, a profuse menstruation came on. In five weeks the cicatrization was completed.

Case 6. Madame R——, 42 years, perceived in the year 1823, after some violent moral afflictions, severe pains in the loins and groins, accompanied by leucorrhœa, for which she underwent remedial treatment, without relief for two years. She then consulted M. Serres in Paris, who found the os tincæ surrounded with slight ulcerations, which were touched with caustic, and this process produced much relief. Eighteen months afterwards she was induced again to return to Paris, and M. Serres found that extensive ulcerations obtained around the mouth of the uterus. He proposed ablation of the cervix, and M. Lisfranc was summoned. This gentleman found deep ulcerations, surrounded with stony hardness, and attended with fetid discharge. On the 26th April the operation was performed, without any thing particular occurring afterwards; and on the 27th June she was pronounced to be completely cured.

Case 7. Rose Rudell aged 27, had experienced for the five preceding years, and without any known cause, severe pains in the loins, copious leucorrhœa, shooting pains in the region of the uterus, irregular menstruation. These symptoms were accompanied by general derangement of the health, and a yellowish tint of the skin. She entered the HOSPICE DE PARFECTIONNEMENT in the beginning of October, 1827, at the time when M. Lisfranc was on duty there. On examination, by means of the speculum, he found ulcerations and induration of the cervix. On the 19th November the cervix was completely removed, and it was evident from the ulcerated state of the parts, that the operation was not practised an hour too soon. The usual symptoms occurred after the operation, and she left the hospital completely cured, on the 31st of December.

We do not deem it necessary to pursue the analysis of the remaining cases. Sufficient have been adduced to show the ordinary symptoms that precede the operation, and the accidents that follow it. In the course of the last four years M. Lisfranc has performed this formidable operation, in the hospital and private practice, thirty-six times. In thirty-three cases the operation was crowned with success. Three of the patients died:—one on the 18th day after the operation—apparently from an affection of the liver, and an encephaloid disease behind the uterus—the second after three months of good health, when the uterine disease returned—the third died from an affection of the spleen, not suspected to exist at the time of the operation. The reporter, M. Avenil, witnessed three other operations of this kind in Paris,—one by Dr. Ricord, one by Professor Recamier, and one by Dr. Hutin. In two of these three cases complete success followed, and the patients now enjoy excellent health. One of them became pregnant in the course of a month after the operation, and was safely delivered. She has since that period borne twins.

When we consider the fatal nature of this disease—the dreadful and lingering torments by which the patients are consumed—the comparative facility of this operation, and the almost insuperable objections to a total ablation of the uterus, we cannot but regret that English surgeons should be behind their continental brethren in courageously affording relief to their suffering country-women, upon such trying occasions. We hope the present Memoir will induce them to take early means for ascertaining the approaches of uterine disease, and that the success of M. Lisfranc and others, will stimulate them to operate before the progress of the malady renders the operation terrible, and the result precarious.—*Ibid. Jan.* 1829.

3.—*Treatment of Varicose Ulcers.—Case* 1—*Division of the Vena Saphena.*—A soldier, 32 years of age, of a good constitution, received a burn in the lower part of the leg, nearly two years before his reception at La Pitie. At this time there was an ulcer, the size of the palm of the hand, and several ramifications of varicose veins were perceived upon the leg. The vena saphena was divided by M.

Lisfranc, below the knee; no sympton whatever of phlebitis succeeded, and in eighteen days the wound had healed. In twenty-four days after the operation the patient was discharged completely cured. He now returned to his usual occupations, retaining no bandage or compression on the leg, the cicatrix got abraded, and the patient reentered La Pitie on the first of August. The ulcer was now not so large as before, and a subcutaneous vein, about as thick as a crow quill had appeared before and below the cicatrix made by the former operation. Simple applications, and the horizontal posture, effected a cure in eighteen days, when the patient was a second time dismissed, with careful injunctions to wear a laced stocking.

Case 2. *Ulcer of the Leg.—Excision of part of the Vena Saphena.*—Charles Perlot, ætatis 52, a house painter, of only an indifferent constitution, was admitted into La Pitie, with an ulcer of twelve months standing, a little above the internal maleolus. The sore was as large as the palm of the hand, and the treatment consisted in the application of emollients and poultices. On the 23d of June, a fortnight after his admission, part of the saphena externa was excised below the knee. On the day of the operation, he required a bleeding from the arm, and, complaining on the morrow of pain in the limb, sixty leeches were applied on the inside of the thigh, followed on the 25th, by a relay of forty more. On the 26th there was a third application of leeches, and the saphena, on the 27th, presented the symptoms of inflammation of its coats, viz. tension, swelling, and tenderness on pressure. Fifty leeches were placed on the upper part of the thigh, but these not sufficing, the same number was twice repeated. The symptoms of phlebitic inflammation subsided, an abscess formed about the middle of the thigh, it was opened, and a wine-glass full of pus escaped. From this time no untoward accident occurred; the wound was healed at the end of five weeks, but the ulcer continued open for about two months, when a laced stocking was applied, and the patient dismissed.

In the first of these cases, *division* of the vein was had recourse to, in the second, *excision*, and mark the results. In the former no local irritation was excited; in the latter, phlebitis was the consequence, and the patient had a narrow escape with his life. Division, with a valvular opening in the skin, is, generally speaking, a safe operation; excision, or ligature, certainly is not. It is but the other day that a patient was lost at Bartholomew's Hospital, by cutting out a portion of a varicose vein, and the experience of the leading men in the profession is almost universally opposed to the practice. The opinions of Sir Astley Cooper, on the subject, are expressed in his usual frank and energetic manner.

"It was formerly the practice, when the veins were in a varicose state, to tie and divide them. This plan is still pursued by many surgeons; but it is one that I have deprecated in my lectures, in this Theatre, for the last eight or nine years; it is very injudicious, and

fraught with great danger, therefore let me exhort you never to adopt it. I have seen this operation prove fatal in several instances, in these hospitals; therefore I was induced to say, that it must not be performed. A gentleman at Nottingham informed me, that he had tied the vena saphena, for a varicose state of the veins of the leg of a young farmer, in other respects healthy, and the operation proved fatal. The same lamentable catastrophe occurred to a most respectable practitioner at Brentford; and this gentleman told me that he would not again perform the operation for the world. If I were to tell you all the cases in which I have known it terminate fatally, I should recount at least eight. Another overwhelming objection to the operation is, that when it does not prove fatal, its ultimate effects are useless. If I were asked which of the following operations I would rather have peformed upon myself, viz. the saphena major vein, or the femoral artery tied, *I certainly should choose the latter!* When an artery is tied, the inflammation is confined to the neighborhood of the ligature; but in a vein, it is very extensive, the vessel becomes exceedingly distended, the inflammation uncommonly severe, either extensive suppuration or mortification ensue, and death is the result."—*Sir A. Cooper's Lect. by Tyrrel, Vol. I.*

The worst of it is, that even where the operation does not kill, it often fails to cure. Again and again have we witnessed division of the vein followed by relief, indeed, a cure, for the time, but quite ineffectual in its ultimate results. The patient returns with the leg as bad as ever, other veins having arisen to occupy the place, or we should say, the office of the one that is obliterated by the knife. Is the surgeon to continue cutting vessel after vessel, running risk after risk, or trust to compression, and palliate what it is not in his power to prevent? We should decide in favour of the latter proposition, and apply the laced stocking, or equable bandaging. Bandages, we think, are the better of the two, but seldom, in the upper classes, admit of being worn. The patent silk bandage, (we really are ignorant of its exact *scientific* nomenclature) is at present much in fashion, and may be had at a mercer's in Oxford street. The fact, however, is, that its great elasticity, for which it has been praised, is its worst and most objectionable quality, as it *gives* far too much to make steady compression. This, in connexion with its comparatively high price, will forever prevent its coming into general use. The lower classes cannot afford it; for the higher, it has most of the inconveniences, and not all the good properties of the cotton roller.

The ulcers which depend upon varicose veins, or varicose ulcers, as they are frequently, and not very properly called, are generally healed by repose, common stimulating applications, as the solution of the nitrate of silver, &c. and especially bandaging and strapping. We say they are healed, for a pellicle of skin will form upon the surface, in nine cases out of ten, by the above means. Though covered, however, with ashes, and extinguished to the view, the fire is

lurking and smouldering below, ready to burst forth on the least exciting cause, and rage as extensively and fiercely as before. It is really astonishiug how quickly these varicose ulcers will skin over, and how quickly again they will break out afresh, when the patient resumes his usual avocations. Careful and continued bandaging, with standing, about as little as possible, are all the prophylactics that the surgeon possesses, or the patient can trust to. We shall not advert to the employment of blisters and irritating applications in the neighborhood of the varicose vessels. They may be regarded rather as matters of curiosity than practical utility.—*Ibid.*

4.—*Lithontripteur.*—Mr. Zanabi Pecchioli, an eminent young surgeon, charged by the Grand Duke of Tuscany to observe the actual state of surgery in various countries, has made a great improvement on, or rather he has added a new and important principle to, the lithontriptic instruments invented by Messrs. Leroyd d'Etoile, Civiale, Amusat, Hourteloupe, &c. &c. We have had a recent opportunity of examining Mr. Pecchioli's instrument, and seeing him work it on different calculi—not, of course, in the living body. We would say that its superiority over the instruments of the gentlemen above named, is threefold. In the first place, it combines the principles of each of the others, the drills and other parts of their machinery being rendered completely available in Mr. P's. apparatus. In the second place, the spring, or ressort, by which the drill or perforator is made to bear on the calculus, and which cannot in the other instruments, be made to vary in force, is superseded by the construction of the pulley, which enables the operator to modify, vary, augment, or diminish, at pleasure, the force used—and that by his own hand. This we conceive to be a very important improvement. But the third modification is the most important of all.—The perforator or drill, in Mr. P's. lithontripteur, can, at any period of the operation, be converted into a kind of trephine, varying in the diameter of its circular movements from the smallest circle up to one of 18 lines in diameter, at the operator's will—and thus becoming capable of grinding down the calculus by a series of gyrations equal in extent to the grasp of the pincers or tenacula, instead of boring holes, and shifting the instrument for each perforation. By this operation, a considerable portion of stone may be ground down by a single sitting; and the danger of large and irregular fragments being scattered about in the bladder, when the calculus is broken after many perforations, according to the methods of Leroy d'Etoile and Civiale, is avoided.

Sir Astley Cooper, Mr. Travers, Mr. Key, and many other distinguished surgeons, have compared Mr. Pecchioli's apparatus with that of M. Civiale's; and, without vouching for the general success of the lithontriptic process, they have no hesitation in acknowledging the great ingenuity of Mr. P's. instruments.

P. S.—When Sir Astley Cooper was in Paris last month, he went to see M. Civiale operate with the lithontripteur. The subject was not one of the best for any operation. M. Civiale threw in half a pint of tepid water—introduced the lithontriptor with the greatest ease, seized the stone, drilled it, and then crushed it, all in the space of about seven or eight minutes. The operation over, the man discharged the water which had been injected, quite turbid with the sawings of the stone, and when poured off, disclosing numerous fragments that had come away with the first evacuation of the bladder after the operation. Sir Astley was quite astonished at the facility with which the whole was performed by M. Civiale. We apprehend that this operation *must* become popular in the hands of a *few* expert surgeons; but we do not suppose it will ever become general among surgeons at large.—*Ibid.*

5.—*Action of the Colchicum on the Urine.*—Professor Chelius, of Heidleberg, has been making a number of experiments on the urine of those who take colchicum for different complaints, and has discovered a very curious and uniform effect to result from this powerful medicine—namely a great increase of uric acid in the urine—and consequently, a great evacuation of it from the system at large.—Thus a man, who had rheumatic inflammation and swelling of several joints, was put upon the use of colchicum, his urine being first examined, and found to contain 0,069 of uric acid, free or combined with ammonia. In four days after the colchicum was commenced, and that in moderate doses, it rose from 69 to 76. On the eighth day it was 91, and on the 12th day it was 102. In short, in the course of a fortnight, the quantity of uric acid was doubled. Experiments were made on a great number of individuals, chiefly laboring under gouty, rheumatic, and neuralgic affections, and all with the same result—a great increase of the uric acid. Professor Chelius thinks, that this operation of the colchicum may lead to some elucidation of the specific efficacy of the medicine in various diseases, and perhaps may throw some light on the nature of those diseases themselves. The Professor appears to employ the colchicum with great success, in neuralgiæ of the face, in sciatica, rheumatic ophthalmia, dropsy of the joints, and in certain paralytic affections of the lower extremities connected with the arthritic diathesis. We would recommend the medical practitioners of this country to note the effects of colchicum on the urine; as the increase of uric acid may lead to the useful employment of this remedy in some diseases to which it is not now applied.—*Ibid.*

6.—*New mode of treating Tænia, discovered by* Dr. Schmidt, *of Berlin, aud described by* M. Caspar, *by order of the Prussian Government.*—On the 14th of October, 1823, Dr. C. A. Schmidt, of Berlin, announced to the minister of public instruction, and

Medical affairs of Prussia, that he had, twenty years since, discovered an infallible remedy for the tape-worm, and was desirous of selling his secret to government. The minister directed Dr. Natorp to make trials with the practice, and, in a report made the 25th of July, 1824, this physician pronounced the treatment of Dr. Schmidt to be excellent; that it was adapted to the most feeble constitutions; brought away the tape-worm within twenty-four hours at furthest; called for no previous preparation, and caused no more exhaustion than a common purgative. Messrs. Kluge and Nureman, physicians to the hospital of La Charitie, at Berlin, were commissioned to repeat these experiments. In the report made by these gentlemen, on the 31st of October, 1826, they express themselves thus:—"The method of M. Schmidt never failed in its effects when the presence of the tænia was established, and those cases wherein it failed to produce evacuation of a worm, the existence of this was regarded as doubtful. At the same time, the treatment is prompt, without danger or exhaustion, and the worm is expelled entire and alive." In consequence of the report made him by the minister, the king of Prussia granted Dr. Schmidt, on the 31st of March, 1827, a pension of one hundred and fifty dollars for the publication of his remedy, which he described as follows:—First day the patient takes in the morning, fasting, two spoonsful of the following preparation, and the dose is to be repeated every two hours till seven o'clock in the evening.

No. 1.—Take powder of valerian root, six drachms; senæ leaves, two drachms; make into an infusion of six ounces, to which add sulphate of soda, three drachms; syrup of manna, two ounces; oil of tansy with sugar,* (oleo-saccharum de tanaisie) two drachms. Mix.

The patient drinks coffee made very sweet, and without milk; at noon plain soup with some morsels of herring, and the roe of this fish; at eight o'clock in the evening a salad made of herrings, raw ham sliced, one onion, with a considerable quantity of oil and sugar. The patient most commonly expels, even on the first day, some portion of the tape worm. In two cases M. Schmidt has even seen the worm evacuated whole from this preliminary treatment alone. The second day the patient takes every hour, beginning at six o'clock in the morning, the following pills:—

No. 2.—Assafœtida, dogs-grass, (chiendent,) each three drachms; powdered gum gamboge, rhubarb and jalap, each two drachms; powdered digitalis, ipecacuanha, golden sulphuret of antimony, each twelve grains; calomel, two scruples; oils of tansy† and anis, each fifteen drops. To be made into a mass, and divided into pills of two grains each, which are to be kept in a well stopped bottle.

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* This is prepared by adding twenty-four drops of oil of tansey to one ounce of loaf sugar.

† Obtained by distillation of the fresh plant.

These pills are taken with a tea-spoonful of syrup. Half an hour after the first dose, the patient takes a table-spoonful of castor oil, and through the day drinks freely of coffee well sweetened. In most instances the worm is evacuated about two o'clock in the afternoon, in which case the pills are to be stopped; but where, on the contrary, only fragments of the tænia are passed, the pills are to be continued, along with which a spoonful of castor oil with sugar is to be given from time to time: the treatment is to be discontinued whenever the evacuations cease to contain any of the worm. At noon the patient takes nothing but broth, and in the evening some soup with fresh butter and sugar. To make sure that, (to use the author's mode of expression,) no more of *the nest of the tænia* remains, the patient may still take some of the pills in the morning. To prevent relapses, the patient ought occasionally to eat herring sallad and horse-radish with vinegar and sugar; or, otherwise, he should continue for some time to take, about every eight days, one or more doses of the pills. When the treatment is finished, the patient is allowed to eat gruel, young meats, chicken, pigeon, the yolk of eggs, good wine in small quantity, and some kind of bitters.

Where it is not certain that tape worm exists, the following method of ascertaining its presence or absence is adopted. The patient eats herring sallad in the evening, and drinks freely of sugar and water; the following morning he uses the following powder in syrup: take powdered jalap, gr. xv. wormseed, gr. x. gum gamboge, calomel, aa. gr. vi. oil of tansy, (oleo-saccharum) 3i. After this powder, the patient drinks coffee made very sweet, or very fat broth. The powder produces copious alvine evacuations, and if the patient be affected with tænia, joints of it, or sometimes the entire worm will appear in the stools. In this last case, the pills are to be followed up by the treatment No. 2, for the purpose of establishing a complete cure, should there be more than one tænia.

Dr. Schmidt does not employ his treatment during pregnancy, nor immediately before or after the menstrual period, nor with individuals affected with inflammations, phthisis, marasmus, hæmorrhoids, hæmoptysis, or senile debility.

Of one hundred and sixty-six persons cured of tænia by Doctor Schmidt, but fifteen were men, twenty had but one tænia, and all the others more, one evacuated as many as seventeen. After the publication of Dr. Schmidt's treatment, the experiments were repeated at the Hospital of La Charitie, in Berlin, with constant success, as shown by the six cases which close the memoir.—*Archives Generales, January,* 1829, *from Hufeland's Journal, August,* 1828.

7.—*Neuralgia Facialis.*—The *Osservatore Medico di Napoli,* No. 18, contains an account by Dr. Campagno, of a case of neuralgia facialis which was cured by the vinous tincture of colchicum. A multitude of remedies had been previously tried without effect.

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8.—*Dysentery.*—Dysentery has recently prevailed to a considerable extent in the Edinburgh Infirmary. The treatment adopted by Dr. Christison, "consisted at the commencement in the liberal use of opium, preceded in some instances by the free application of leeches to the lower part of the belly, and frequently accompanied with the application of large blisters, and with the use of the warm bath. If the stage was passed during which feculent matter was discharged, and the evacuations had become muco-sanguinolent or sero-sanguinolent, I usually directed the application of the leeches to be immediately followed by doses of pure opium, of such magnitude and frequency as were found necessary to check the unremitting diarrhœa and tormina; and sometimes the desired effect was not procured till the patient was pretty strongly affected by the narcotic action of the drug. In urgent cases twenty or twenty-four grains in the twenty-four hours were sometimes necessary from the very beginning; in the slighter cases four or six grains were sufficient. When an impression was once made on the discharges, it was maintained by doses of two or three grains repeated according to circumstances; and frequently the exhibition of opium by the mouth was conjoined with its employment in the form of suppository. I never but once found this plan to fail in checking the discharge of blood in twenty-four or forty-eight hours, if the patient was seen withinthree or four days; but the blood often reappeared abundantly in the stools, if the opium was intermitted on account of its causing too complete constipation. After the hæmorrhage was permanently checked, the frequent thin feculent stools continued many days, sometimes many weeks, indicating, it is to be presumed, the existence of ulceration, which consequently must have taken place at a very early period of the disease. The opium, it is worthy of remark, rarely caused sickness or dry tongue. In cases in which the stools continued long thin, and with a tendency to be tinged now and then with blood, an opportunity occurred for trying various remedies which have been supposed to be useful in this stage by accelerating the cicatrization of the ulcers. But I cannot say that any of them appeared to be of use, unless opium was combined with it in such quantity as to be itself a powerful agent. The acetate of lead was perhaps an exception; it certainly rendered the stomach less irritable, in the few cases in which opium alone was rejected by vomiting; and although I had too few opportunities of trying it in idiopathic dysentery, the experience I have had in the Fever Hospital and Infirmary feverwards of its good effects in the chronic dysentery which is sometimes left after fever, induces me to think that its alledged virtues in the chronic stage of idiopathic dysentery have not been exaggerated.—Neither ipecacuan, nor nitric acid, nor calomel administered so as to affect the mouth, appeared to me materially useful. I have had but one opportunity of trying the effect of calomel in scruple doses upon the early stage of the disease. It was given on the fourth day with marked advantage, certainly, and was repeated next day with equally

good effect. But ulceration had evidently taken place before the patient came under my charge; and although the acute symptoms were checked, yet, as the patient was an emaciated subject transferred from the surgical wards with a recently opened, extensive, chronic abscess, he sunk under the exhausting purulent discharge from the bowels and abscess together. The only other patients I lost were two in number,—one an old man of ninety, who entered the hospital on the eighth day of his illness in a state of extreme exhaustion, so that, although the stools were checked, he died two days afterwards,—the other, a young woman, who immediately after coming out of an exhausting and tedious attack of continued fever with marked enteritic symptoms, was seized with dysentery in its worst form, and died on the tenth day without experiencing any relief from treatment beyond the allaying of pain."—*Ed. Med. and Surg. Jour. January*, 1829.—*Ibid.*

9.—*Complete Amaurosis cured by the application of Leeches to the Nasal Fossæ.*—Dr. GUEPINET of Landrecies, relates in the *Annales de la Medicine Physiologique, Vol. X.* the case of a child aged five years, who was suddenly attacked with complete amaurosis, without any known cause. The disease resisted the usual remedies for near two months and a half, when Dr. G. being consulted, he advised the application of leeches to the nassal fossæ. The day after the application the child was able to see a little; thus encouraged, Dr. G. had one or two leeches applied daily for a week, at the end of which period the child's sight was entirely re-established.

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10.—*Remarkable Superiority of amputating by one Incision through the Integuments and Muscles.*—This great improvement in the mode of amputating, which was formerly recommended by Louis, and unaccountably abandoned, is practised and highly recommended by all the present surgeons of the Hotel Dieu, M. Dupuytren, M. Breschet, and M. Sanson. In thighs removed by the two former, and an arm by the latter, no tourniquet was employed in either case. The limb was grasped by an assistant, and pressure made on the principal artery. A single incision cut through skin and muscles down to the bone, and a retraction of the skin and muscles not inserted in the bone was effected to the extent of three inches. The first retraction having been completed, the muscles attached to the bone were cut through by a scalpel, on a level with the others, and the bone sawed as usual. The stumps in all were remarkably fine, and the strength of the bone was more than sufficiently recovered.

After each operation, the surgeons respectively explained their reasons for preferring this procedure, whose expediency was proved by the result of every case in which it has been tried of late. To say nothing of the discarding of the tourniquet, which enables the operator to effect a retraction of the muscles to a greater extent than

under its use; the old method of preserving the skin by cutting it up from the muscles to which it naturally adheres, was a considerable impediment to union by the first intention.—*Lond. Med. and Phys. Journal.*

11.—*On Blistering Infants.*—The melancholy consequences which frequently arise from the application of blisters to young children, renders every suggestion which is probable may prevent them of great importance. We find that an hour or an hour and a half is a sufficient time for a blister to remain upon a child, and although at the expiration of that time no vesication is apparent, yet, if the part be covered with any mild dressing or a poultice, a sufficient degree of irritation will be observed in a few hours' time, in fact quite sufficient for the peculiarly delicate and susceptible constitution of children. When the emplast. cantharides has been employed in this manner, we have never witnessed any alarming result.—*Lon. Med. and Surg. Journal.*

12.—*Neuralgia.*—Dr. Wilson the talented author of a work on West India Fevers, reviewed in a former number of this Journal, has transmitted to us some observations on the dreadful case of Neuralgia lately published for consultation, in No. XVIII. of this Journal, page 435. We shall take the liberty of quoting a passage from Dr. Wilson's letter, as it contains some practical facts of interest and utility.

"In three cases of neuralgic disease lately under my care, a cure was effected, by the combination of calomel, opium, and oil of turpentine. In my memoirs of West India Fever, I there stated my belief that the oil of turpentine not only accelerated the action of mercury, but also, in certain cases, increased its curative effects. In the neuralgic cases to which I allude, I gave the turpentine chiefly with the view of speedily inducing the specific action of the mercury. I am now, however, inclined to believe that the turpentine operated beneficially in itself. The following is the mode of administration which I have employed in the three neuralgic cases above-mentioned.

A pill, containing from two to four grains of calomel, and one or two grains of opium, was given each night at bed-time, and, next morning, one or two drachms of oil of turpentine, mixed with a little honey. In each of the three cases, a complete and permanent cure has been effected by this plan, and in a moderate space of time."

Med. Chir. Review.

13.—*Ascites cured by Pressure.*—Our readers are aware that Sir Gilbert Blane proposed pressure on the head, for the cure of hydrocephalus, and that the plan has been adopted by some others—not, we should suppose, with great success, otherwise we should have heard of it. Anasarca of the legs is every where treated by pres-

sure, in the form of bandages, to promote absorption—or, rather perhaps to force the serous infiltration into another and worse locality. Indeed, we have generally observed, that patients have complained of oppression about the chest, or sense of fulness in the abdomen, when tight bandages were applied to prevent or remove anasarcous swellings. Till the secretions and excretions are set free, there is little permanent relief obtained in dropsy of any kind. The principle of pressure has been applied in the case of ascites, by Dr. Speranza, physician to the Clinical Institution of Parma.

Case.—A female had labored for some months under considerable effusion into the cavity of the abdomen, the consequence of peritoneal inflammation, which had succeeded to a laborious accouchment. She entered the Parma Clinical Institution in the month of April, in a very weak condition, being apparently worn down by a slow fever, and lactation beyond her powers. The digestive functions were very much deranged—the urine scanty and turbid—thirst—constipation. The great distension of the abdomen by effusion, prevented any accurate examination of the viscera, as to their state of soundness. There was general emaciation, and a highly cachectic aspect. After a fair trial of diuretics, purgatives, mercurials, and the usual remedies, Dr. Speranza declined to recommend paracentesis abdominis, from a conviction, that this operation is never of any ultimate service; he had recourse, therefore, to the bandage of Monro. Under the influence of the pressure thus produced, the urine became copious, so that, at length, it amounted to *fifteen pints daily!* In the course of three weeks, the abdomen was reduced to its natural size, and there was no further effusion. The sulphate of iron, squills and a nourishing diet contributed to a completion of the cure. She was ultimately discharged from the Hospital in perfect health.

It would be a very curious fact, if proved by subsequent experience, that pressure on a distended abdomen caused an increase of the urinary secretion. We could only account for it in this way:—the pressure augmented the action of the absorbents, or checked the activity of the exhalents, or both—and the blood-vessels being replete with serous fluids, the secretion of the kidneys was augmented and thus the ascites cured. We think the remedy, especially if combined with *diuretic frictions*, might be well worthy of trial.

Ibid.

14.—*Treatment of Strictures of the Urethra.*—The mode of curing strictures of the urethra by confining a *large* bougie at the anterior part of the obstruction, is still employed with undeviating success in the wards of M. Dupuytren and of M. Breschet at the Hotel Dieu. The mere contact, accurately preserved for eight or ten days, often enables a catheter of the largest size to pass freely where the smallest bougie could not previously penetrate.

"The bougies thus introduced are provided with four very narrow tapes or strings, whereby the are attached to a T-bandage, surrounding the waist and under the scrotum. In their passage they are

coiled, at equidistant points, round a ring which is placed over the body of the penis."—*Lon. Med. and Phys. Jour. Jan.* 1829.

15.—*Mode of Preserving Specimens of Morbid Anatomy*—By John S. Gaskoin.—Mr. Gaskoin recommends the following means for preserving the appearances of diseased parts:—"Having removed the diseased part from the body, it should be as little handled or dissected as possible, especially when the effects of inflammation, congestion, &c. are to be preserved, as the blood may be pressed from, or disturbed in, the minute vessels. Let the blood which may have escaped from cut vessels, be gently washed off from the surface by a solution of the *muriate of ammonia*, or be absorbed by a soft sponge, lightly applied. The part should then be wrapped with care in old linen, and be so immersed in *one part of a saturated solution of the muriate of ammonia*, (sal ammonia of commerce) and *two of rectified spirit of wine*. After two or three days the linen may be removed, and the part restored to the fluid.

"Should the preparation be large, or from the nature of the disease, contain a large quantity of aqueous fluid, then an additional portion of the muriate of ammonia in powder should be added, to meet the excess of aqueous menstruum.

"The time necessary for maceration will mainly depend upon the size of the part to be preserved; but, generally, from ten to fifteen days will be found to be sufficient, although nothing can be lost by an extension of that time. Being taken from the macerating fluid, it should be again washed in a solution of the muriate of ammonia, then dissected as much as requisite, and be 'put up' at once, *in equal quantities of a saturated solution of the above salt in distilled water and rectified spirit of wine*. I should observe that, in these proportions, the part is somewhat corrugated, which is not the case if one-third of the saline solution be used with two of spirit; yet, in the former quantities, I have some reason to think the appearances of disease may be more securely preserved."

This solution, he says, seems to have the property of fixing the blood in the extreme ramifications, without constringing the vessels themselves; while rectified spirit corrugating the delicate membranes of the minutest vessels, repels their contents into the larger, the thicker coats of which are easily acted on, and thus reduces the appearances of inflammation, &c.—*Lon. Med. Gaz. Dec.* 1828.

16.—*Danger of Artificial Inflation of the Lungs.*—The practice of artificial inflation of the lungs, as a means of recovery from drowning, has been objected to before the Academie des Sciences, on the strength of experiments made by M. Leroy d'Etortes, on various animals, especially on Sheep, which are stated to prove, that the practice is attended with great danger, and that a strong inflation is capable of producing instant death, although some animals are better able to bear the process than others, a dog, for instance, than

a sheep, on account of the stronger texture of the lungs. The experimentalist infers, that the number of persons restored to life from drowning, is less than it would be, but for the use of inflation as a remedy for their recovery.—*Bos. Med. and Surg. Jour.*

17.—*Iodine for Chilblains.*—The tincture of Iodine has been recommended for the cure of chilblains. Two or three applications of it are said to restore the skin to its natural state.—*Ib.*

18.—*Sting of a Wasp.*—The editor of a French Journal says, the root of the onion, or of garlic, bruised, and applied over the part stung by the wasp, instantly subdues the pain. The spirit of hartshorn and soap-lees have the same effect.—*Ib.*

19.—*Success of cold effusions in Hysteria.* By Dr. LEVACHER. The patient, æt. 15, after a paroxysm of anger, was attacked with all the symptoms characterizing hysteria in its most violent form, which continued with undiminished severity for the space of four days, notwithstanding the employment of leeches, sinapisms, the warm bath, enemata, and a variety of antispasmodics. Dr. Levacher ultimately directed cold well water to be poured upon the head from the height of two feet and a half, and permitted to run down over the loins. This affusion was followed by an immediate mitigation of all the symptoms. She rested well during the night, and the next morning her pulse was regular, and the hypogastrium no longer painful. This favorable condition, however, was interrupted towards noon by a fright which she received from a dream that robbers were breaking into her room; she awoke in great terror, and a repetition of the convulsions was the consequence. Recourse was again had to the cold affusions, and with the same salutary effects as before.—The day following, she was still better, but the headache continuing, a bladder filled with iced water was applied to the head, and bottles of warm water to the feet, which succeeded in removing it. Two days later she had a return of the convulsions, but they speedily yielded to the foregoing plan, and did not again recur.—*Journal des Progres, &c.*

20.—*Radical cure of a Hydrocele, by the introduction of a needle into the Tunica Vaginalis.*—The patient had for several years been incommoded by a very large hydrocele, which had been repeatedly punctured and injected, but without success. The fluid was constantly reproduced, and the patient was desirous of undergoing an operation which would effect a radical cure. The following plan was adopted by Dr. Moro. The patient being seated, a trocar was introduced at the usual place of puncture; the preforator was then withdrawn, leaving the canula, and through the latter a long needle, like those used in acupuncturation, was introduced from below, upwards in the direction of the abdominal ring, and near the sperma-

tic cord, so as to pierce the integuments on the side of the penis. After the water had been entirely discharged, the canula was withdrawn, and the two extremities of the needle approximated and twisted together. A slight degree of pain and heat in the groin, which was propagated towards the kidneys, followed the operation, but disappeared in the space of twenty-four hours; six days afterwards, the scrotum had regained its natural form and dimensions; two red points were seen where the integuments had been perforated by the needle. The latter was divided by the cutting pincers, and removed without the slightest difficulty. A year and a half have now elapsed, and there has been no return of the disease.

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21. *Nux Vomica in Chronic Diarrhœa and Intestinal Hemorrhage.*—M. Recamier, of the Hotel Dieu, having learnt that the nux vomica was used in chronic diarrhœa by the practitioners of the north, administered it in the following case, with success.

A man, fifty years of age, eminently nervous, had been long subject to alternations of bilious diarrhœa and intestinal hemorrhagy, which had reduced him to an alarming state; his lips and countenance were pallid. Sometimes the bilious flux preceded the hemorrhoidal discharge; at others the order was reversed. Colombo, semirouba, and powdered charcoal, had been tried without effect. Opium in the dose of a quarter of a grain, disagreed. One-eighth of a grain of the alcoholic extract of nux vomica was then prescribed. On the following day the stools were reduced from twelve or fifteen to three or four. The dose was then doubled, one quarter of a grain given, and the patient was speedily cured by this treatment.—*La Clinique.*

22.—*Diagnostic Symptoms of Dislocation of the Head of the Femur into the Ischiatic Notch. By Dr. Buchanan.**—Sir A. Cooper has observed, that "of all the dislocations of the thigh, this is the most difficult to detect, because the length of the limb is but little altered, and the change in the position of the knee and foot is not so marked as in the dislocation upwards." The symptoms which Sir Astley details as diagnostic are the following.

"The limb is from half an inch to one inch shorter than the sound one, but rarely more than half an inch. The natural projection formed by the trochanter major is diminished, and is inclined towards the acetabulum, but still remains at right angles with the ilium. The head of the bone can only be felt in very thin persons, and then not very distinctly. The knee and foot are turned inwards, and the great toe rests against the ball of the great toe of the sound limb. When the patient is erect, the toe touches the ground, but the heel does not quite reach it, and the knee is bent, and projects a

* Glasgow Medical Journal, No. IV.

little forwards. The motions of the joint are, in a great degree, prevented, admitting of but slight flexion and rotation."

These symptoms, Dr. Buchanan considers as characteristic of dislocation, when it actually exists, but simulated so far by other affections of the joint, as to lead to error when adopted in every instance, as our guide. A truly diagnostic sign, then, being wanted, the author of the paper believes that he has found it, and proceeds to make it known. In the summer of 1821, a young woman was brought into the Glasgow Infirmary, after falling from a height, a good deal bruised and affected, soon afterwards, with a paralysis of the right leg. These symptoms had nearly disappeared when Dr. Buchanan first saw the case, but others were present closely corresponding with those laid down by Sir Astley Cooper, as marking dislocation into the ischiatic notch; an accident which was thought to have happened to the patient. Gradually, however, the limb re-assumed its natural aspect, and showed that the doctors had been taken in.

"In reflecting on the preceding case, it occurred to me, that it would be of much importance in supposed cases of dislocation into the ischiatic notch, to institute a comparison of the limbs, not while resting in the same plane with the body, but when bent to a right angle with the abdomen; the reason of which must be sufficiently apparent, from considering the anatomy of the joint, and the nature of the injury. The head of the femur being thrown almost directly backwards, and very little upward, it is clear, that so long as the limbs remain in the plane of the body, there can be very little difference in their relative length; since that difference is only measured by the extent of the displacement upwards. But if the limbs be slowly bent towards the abdomen, the difference in their length must become greater and greater, till it attain a maximum, when the limbs are at right angles with the body; the luxated limb being then shortened by the whole extent of the dislocation backward. I had no opportunity of verifying this reasoning by actual observation, till the occurrence of the following case, in 1826, and I had then the satisfaction to find, that the mode of examination described above, yielded the only symptoms which were perfectly unequivocal."

A child, three years of age, fell from a chair, and when seen by Dr. B. six days after the accident, presented the following appearance. The girl could not walk nor stand without assistance, but, when supported by her mother on the sound limb, the toes alone of the other touched the ground, were a little turned in, and rested in the same transverse line with the metatarsal bones of the opposite foot. The knee was considerably bent, and advanced before its fellow; the shortening of the limb, if any existed, could not have been considerable; the thigh could be bent towards the abdomen with facility, and seemingly without producing much pain, whilst abduction and rotation were not only painful, but comparatively difficult; the head of the femur could not be discovered; the trochanter was little displaced; the contour of the haunch not materially altered;

and, lastly, the limb altogether had more the appearance of being drawn up by a voluntary effort, than of being actually shortened by displacement. These symptoms were dubious, but uncertainty vanished the instant the patient was placed upon her back upon a table, and both thighs bent to a right angle with the trunk of the body. The shortening immediately became most decided, the affected knee, resting in the hollow below the condyles of the opposite limb. The trochanter, also, was felt much farther back than on the sound side.

Dr. Watson, Dr. Young, and Dr. Auchincloss, being also satisfied of the nature of the accident, the reduction was effected next day, by placing the patient in a sitting position on a table, to which she was fastened down by a sheet, and secured by a man standing astride it behind her—performing extension by a bandage round the ancle—and lifting the head of the femur over the edge of the acetabulum, by means of a handkerchief passed under the thigh. The reduction took place with an audible snap.

This mode of examination, our author considers applicable to dislocation into the foramen ovale, but there is just this slight objection which strikes us, namely, that one of the distinguishing marks of these dislocations is the immobility, at any rate impaired mobility, of the limb. In the dislocation into the ischiatic notch, Sir Astley Cooper expressly states, that the thigh admits of but "slight flexion and rotation," and when the displacement is into the foramen ovale, we should think the want of motion would be greater still. In some cases, however, the one for example detailed by Dr. B. the limb was so mobile, as to admit of the application of the test, and, in such, it may prove a valuable addition to our diagnostic marks. In cases of contusion, or inflammation of the joint, simulating dislocation, such an examination seems perfectly applicable.

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23.—*Traumatic Tetanus—Pathology of.*—We are inclined to think, that if ever the true pathology of traumatic tetanus be discovered, it will be found, that the nerves leading from the injured part will exhibit symptoms of inflammation, and that this inflammation will extend to the spinal marrow. In a former number* we alluded to some researches made by M. Lepelletier, surgeon of the Hopital du Mans, on the subject of tetanus traumaticus. He had scarcely published his paper, when the following interesting case occurred, confirmatory of this gentleman's doctrines.

Case. Peter Crepon, aged 15 years, feeble in constitution, and miserable in circumstances, had been effected with a tumour on the *left* heel, from the age of three years, which, gradually increasing, ulcerated, assumed a malignant character, and, finally led to amputation, at the Hospital of Mans, on the 28th of December, 1827.

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* See No XVI, April, 1828, p 439.

Nothing particular occurred till the 5th of January, 1828, when he complained of convulsive twitchings in the stump. On the 6th, symptoms of tetanus came on and were soon unequivocal. It was remarked, that the temporal and masseter muscles of the *left* side only were affected with trismus. This corresponded with the amputated limb. We shall not detail the daily treatment and symptoms. Repeated venesections were performed, and, in almost every instance, they relieved the tetanus for a time; but nothing could arrest the progress of the disease, and death took place on the 9th of January.

Dissection. A small depot of purulent matter was found in the stump, on the head of the fibula, with traces of inflammation in the neighborhood. The sciatic nerve at this place was found so much injected as to be of a violet hue, while the same nerve, in the other limb, was of its natural color. This discolouration continued, with some interruptions, up to the hip. The patient, during life, complained of pain in the track of this nerve, when pressed by the hand—and that for some days previous to the development of the trismus. The discoloration could be traced in some branches of the sciatic nerve distributed to the crural muscles. The pulpy substance of the nerve was found to be somewhat softened. The pia mater of the spinal marrow was decidedly injected; especially towards the middle of the dorsal region, where the medulla itself was softened and degenerated in structure. Some reddish effusion was also found under the membranes of the medulla spinalis.—*Jour. de Progres.*

The narrator thinks that the evidence of the inflammation of the nerve from the stump to the spine, as the cause of the tetanus, is here complete. We do not think that the deduction can be denied, as far as this case is concerned; but, unfortunately, there are other cases of traumatic tetanus, where the most careful dissection cannot detect any inflammation of nerve between the seat of injury and the encephalon. A case occurred at St. George's Hospital, where the spinal marrow, and the nerves of the limb were carefully examined, but without success. These conflicting facts prove that tetanus may be induced by the local injury, with or *without* evident change in the spinal marrow or nerves.—*Med. Chir. Rev.*

24.—*Ointment for Glandular Swellings.*—Professor Dupuytren recommends the following as a formula for an ointment to be rubbed over the region of the engorgement. The stimulating action of the ammonia aids, he thinks, very powerfully the deobstruent property of the mercurial ointment. Take *strong mercurial ointment*, twenty four parts; *hydrochlorate* (muriate) *of ammonia*, six parts. Mix accurately.—*N. A. Med. and Surg. Journal.*

25.—*Caustic Paste.*—Professor Graefe recommends, as a preparation adapted to destroy the callosities accompanying fistulas, *perchloride of mercury* (corrosive sublimate) two drachms; *gum arabic*

and distilled water, of each twenty-four grains. Mix them with care. The paste is to be applied to the callous parts.—*Ibid.*

26.—*Collyrium Siccum for the Opacity of the Cornea.*—Take *red oxide of mercury* and *white agaric* of each half a drachm; *white sugar*, one ounce. Mix accurately so as to make a very fine powder. A small quantity is to be blown on the eye daily.—*Ibid.*

27.—*The Effects of entire Abstinence from Solid and Liquid Food.*—This is a question which exercises a very important bearing on therapeutics. It has been the theme of much, and at times no very measured, discussion. It is one, moreover, which nearly and deeply concerns mankind at large, not only on account of abstinence being made a means of relief from disease by the professional attendant, but also on account of the possible widely extended application of the measure among all classes of society, without any other counsel than the consciousness of their being sick. The plainest dictates of instinct, and arguments of common sense, are in favor of its adoption under circumstances of bodily disturbance and disease; and it is to be greatly regretted that false theory and the vaguest analogies should have induced a portion of the medical community to discountenance it.

We wish at this time more especially to direct the attention of our readers to the *Experimental Inquiries* made by Dr. COLLARD DE MARTIGNY—1. *On the effects of complete abstinence from solid and liquid food on the organs of the body; on the quantity and composition of blood, and the nature and course of the lymph:* 2. *On the morbid alteration of the fluids; the proper time for abstinence and bleeding in certain diseases; the use of the lymphatic vessels; and the existence of a lymphatic temperament.*

The effects of entire abstinence on the organs, as evinced in dogs and rabbits starved to death, are general and excessive emaciation, and a diminished size and colourless state of the muscles. The heart has little volume, and, as well as the aorta, vena cava, and pulmonary artery, contains a very small quantity of blood. The lungs are entirely empty of blood; the lining mucous membrane is pale; the liver, spleen, pancreas, and kidneys are remarkably pale and small; their vessels empty, and parenchyma having little consistence. The vesical mucous surface is of a pale white. The gall bladder is of very considerable size, and distended with a large quantity of greenish yellow bile, limpid and very fluid.

The stomach is contracted on itself, the mucous coat exhibiting numerous folds, running in every direction, but especially from the cardia to the pylorus. The medium thickness of the stomach is a line and a half; its cavity is empty; the pyloric portion has a deep yellowish tint; when washed, its internal membrane towards the cardia is of a silvery whiteness, as Haller has already remarked, and towards the pylorus of a yellowish white. *In no part did it exhibit the slightest trace of inflammatory alteration.*

Throughout the entire extent of the intestinal tube the mucous memberane is wrinkled; that of the small intestine is deeply coloured with a greenish yellow, which is less evident in the large intestines. *As in the case of the mucous membrane of the stomach, that of the intestines exhibited, in its appearanae, color, aad consistence, no sign of inflammation.* Both the small and large intestines are of diminished diameter, and contain a greenish yellow matter; which, fluid in the duodenum, increases in consistence in proportion as we leave the stomach.

In one case, the intestinal tube contained, throughout its entire extent, a small quantity of a dark green matter of a very putrid odour. The mucous surface of the inferior portion of the small intestine, and of the cœcum, in which it most abounded, was studded with violaceous spots. The mucous membrane of the stomach was strongly contracted and wrinkled, and of a slightly roseate hue at its pyloric extremity.

There is a notable difference in the duration of life between dogs and rabbits deprived of all nutriment; the carnivorous animals surviving much longer than the herbivorous. Age and size are also modifying conditions; since the older and larger the animal, the greater are its powers of living under a privation of all aliment.—Thus, of three dogs submitted to the above experiments, the largest lived thirty-two days; the second, which was larger than the third, lived twenty-seven; whilst the third and smallest survived only twenty to twenty-one days.

The medium period in which three rabbits survived entire abstinence from food was ten to twelve days. It is greatly abridged if the animal be very young; as in the instance of three rabbits six weeks old, two died on the seventh, and one on the eighth day of starvation. A rabbit only three weeks old, died on the night succeeding the third day of privation from food.

The contrast in the powers of enduring hunger between the carnivorous and herbivorous animals, was clearly exhibited in the cases of the rabbits seven months old, and the third dog mentioned above. Their size was nearly equal, and yet the first lived but ten or twelve days, while the latter survived three weeks.

In rabbits there is much less general emaciation and loss of the cellular tissue of the parenchyma of the organ; the muscles preserve nearly three-sevenths of ther first size. *All the mucous membranes are white and without any appearance of inflammation.* The cavities of the heart, the beginning of the aorta, and venæ cavæ and pulmonary vein, contain a small quantity of blood. The small vessels and capillaries are destitute of this fluid; the cornea is sunken and rather cloudy. It was never observed to be ulcerated.

In regard to the *effects of abstinence on the quantity of the blood*, Dr. De Martigny shows, by direct experiments, that there is a progressive diminution of this fluid throughout the entire period of alimentary privation.

Not only is there an ***alteration in the quantity***, but also in the quality or composition of the blood after prolonged abstinence.—The quantity of albumen is increased, that of fibrin diminished. For farther particulars on this head we refer to our department of chemistry; wishing on the present occasion to restrict ourselves to what has a direct therapeutical application in the experiments of Dr. De Martigny.

This gentleman concludes his chapter on "***the effects of entire abstinence on the quantity and course of the lymph***," by saying that the velocity and course of the lymph in the vessels must decrease in direct proportion to the diminution in quantity of this fluid: and that, towards the conclusion of the period of forced abstinence, the slowness of the course of the lymph is such, that this fluid merely flows in drops, at intervals, from an opening made in the thoracic duct above the diaphragm. The first and immediate effect, however, of fasting is to accelerate the progress of this fluid. The change in the ***composition of the lymph*** after entire and prolonged abstinence is also distinctly shown by the author.

He asserts, in reference to the evidences of local inflammation, designated in some of the examinations after death from abstinence, that these are a complication, and are at any rate of very rare occurrence; since out of eighteen animals opened and examined with the most scrupulous accuracy, he only met with three examples of this nature. Two of these had an evident origin. In the first, the microscopic ulcerations of the tracheal membrane were consecutive to an incision of the trachea, and probably also to the accidental introduction of dust or other light matters floating in the air. The violaceous spots of intestinal mucous membrane of the dog already mentioned, were due to the presence of excremental matters, become putrid and infectious in the intestine.

In the recapitulation of his subject, the author says that the *disease* produced by prolonged abstinence until death, is the result, 1st, of an alteration of the solids; 2d, and chiefly of alterations of the blood, which are at once the *mediate* and *immediate* causes.

The "***reflections on the proper time of low diet and bleeding in certain dieases***," without being long or profound, are nevertheless worthy of all attention. Abstinence has long been considered to exert the same effects which are produced by blood-letting, but in a slower manner. The author thinks that we rely too much on the safety with which low diet can be persevered in. What, he asks, results from this course? "The patient continually loses flesh; his sensibility and imagination are exalted, while his physical and moral powers are prostrated; his sleeplessness is increased; his weakness or concentration of pulse, paleness of the mucous surfaces, and diminution of secretions, announce the alteration in the quantity and composition of the blood. These are identical effects with those of general bleeding. Why then bring about slowly a state of things which we should tremble at causing with greater promptitude?" It

might be said in reply that it is not these effects which the physician deprecates, so much as a sudden general prostration and loss of balance between the heart and capillaries, which are occasionally caused by injudicious general bleeding.

The author next adverts to the exalted sensibility of the digestive canal, caused by long withholding food, and the consequent inability, after a while, to tolerate it in a common or even reduced quantity.

A caution is given to the surgeon not to be too prodigal of the blood of a patient suffering from wounds or fractures, since it has been seen that the wounds of animals subjected to prolonged abstinence cicatrize very imperfectly.

A rigid diet is more especially of dangerous tendency in cases in which there is a purulent cavity in any part of the body, or a suppurating wound of a bad character. The first effects of fasting are, as already stated, a diminution in the quantity of blood and an increase in that of the lymph; that is to say, a very accelerated absorption—of course an absorption of the foreign and purulent matters from the sources above indicated. Among numerous other examples, the author cites the cases given by M. Andral; in one of which a woman with chronic nephritis, the thoracic canal was found full of pus, and, some time before death, there had been *marasmus* and *hectic* fever; in two other women dead of *cancer* of the uterus, and the pelves of whom contained putrid matter and many cancerous masses, the thoracic canal held a puriform fluid and a matter analagous to the cancerous masses. Instances are recorded by M. M. Vallerand de la Fosse, Velpeau, and Bouillaud, of encephaloid and cancerous matters in the veins. Dupuytren and Magendie furnish similar cases.

The two last chapters of the long and interesting paper of Doctor Collard de Martigny, are on the *functions of the lymphatic system*, and on the temperament characterised by the predominance of this system. These have been noticed in their proper place, under the physiological head.—*Ibid.*

28.—*Of the Medicinal propertics of Leontodon Taraxacum.*—Mr. Houlton, in the London Medical and Surgical Journal for September, after adverting to the great discrepancies of opinion in regard to the dandelion, thinks that the cause is to be found in the different seasons in which the extract of the juice is prepared, and the corresponding variety in the activity of that sold in the shops. As usually obtained from the latter, it has very little virtue.

The most uniform and active preparations of this plant may, in Mr. H's. opinion, be obtained by carefully evaporating spontaneously the expressed juice of the roots taken up in August and September. In cases of chronic disorder of the digestive organs not produced by intemperance, its efficacy is frequently very decided. In visceral derangements from intemperance, Mr. Houlton did not find it of much service, but in females and other persons of sober habits, and

of studious and sedentary pursuits, it has been very beneficial, increasing the flow of bile and allaying that uneasiness which the dyspeptic frequently experience about the hepatic region.—*Ibid.*

II. Analytical.

29 *Mania a potu.*—Having considered this malady at some length, in reference to jurisprudence, we are tempted to resume it as a subject of practical medicine. The best, and only monographic treatise on this disease, is that of the learned and accurate Dr. Coates, one of the able Editors of the North American Medical and Surgical Journal, and contained in the 7th and 8th numbers of that work. It is not our design to analyse these interesting papers, which contain a synopsis of nearly all that was known on the subject, at the time they were written, but to lay before our readers the conclusions of the author, as summed at the end of the second paper. They are as follow:—

1. The disease is a delirium, and not a mania; and this distinction should be attended to, both for medical and legal reasons.

2. It consists in a heightened activity of the sensorium; and this appears to arise from the generation, in that organ, of an unusual vital power, which is not, as in common, exhausted by the narcotic poisons habitually used. This is not considered as an hypothesis, but the expression of a fact existing in nature.

3. The delirium may be combined with other diseases and injuries situated in many different parts of the body.

4. When violent, it obscures and renders imperceptible most of the symptoms of the co-existing disease.

5. It is doubtless necessarily accompanied, as all vital excitements are, with an unusual amount of the circulation of the blood in the organ affected; and is, from this cause, sensibly influenced by cups, blisters and emetics. It is not so far checked by the use of emetics as to render these advisable as a leading means of cure. It is not sufficiently under the control of the general circulation to be cured by venesection, or to be sensibly relieved by it without such an exhaustion as is highly dangerous to life.

6. It is entirely and absolutely under the controul of opium; although the fevers and other diseases which are liable to accompany it may be by no means so.

7. It admits of very large doses of opium, which are not productive, either at the time or subsequently, of any injurious consequences, provided they are not repeated after a tendency to sleep is evinced.

8. The patient must *sleep or die.* There is no alternative. Yet the physician should personally watch the effect of very large doses of opium.

9. There is no distinction of stages which need occasion a moment's delay in resorting to opium.

10. Purgatives are of no use in this delirium; but it is necssary to prevent costiveness subsequently to the administration of opium. Purgatives may be necessary for diseases which exist at the same time; but when this is the case, they are, in general, most advantageously postponed till after sleep has been obtained.

11. Gentle stimulants are frequently useful during the convalescence; but these should not resemble ardent spirits, and an excellent and sufficient one is capsicum. Nor should any ardent spirits, unless indicated by peculiar circumstances, be given during the paroxysm.

In the Medico-Chirurgical Review, for July, 1826, we find a notice of a paper on delirium tremens, by Mr. G. Playfair, published in the Transactions of the Calcutta Society, which as it goes to illustrate the phenomena and treatment of this disease in the East Indies, we shall extract.

In some instances, say the Reviewers, the restlessness continues, with particular wildness in the eye, and a dislike or a want of power to remain quiet. These symptoms gradually increase—he cannot lie down—or, if he does, he starts up as if likely to be suffocated. He talks in a strange manner, yet with the appearance of being perfectly in his senses; complains of the other patients making faces at him, and entering into conspiracies against him, &c. This is accompanied, of course, by want of sleep. It now becomes necessary to separate the patient from others to prevent mischief—and restraint itself is soon indispensable. Our author's experience does not coincide with those who believe that the disease only takes place in advanced life; on the contrary, he has found it almost invariably affect the young, the religious, the robust, the plethoric, and especially those who have been suddenly debilitated by previous illness. The mode of treatment in this case is to procure sleep, as this has always relieved the complaint. With this view, a full anodyne draught was exhibited at bed-time, and sometimes repeated at midnight, if not efficient by that time. When symptoms of mental derangement took place, he commenced with, perhaps, 100 drops of tincture of hyoscyamus, and 30 of laudanum, repeating 20 of the former, and ten of the latter, every two hours, as regularly as possible till sleep was procured. He has succeeded in twelve hours, but it has required 24, and even 36 hours before irritation could be allayed or sleep procured. He has been obliged to suspend the use of opium, till the bowels were well evacuated. But he generally continued

the use of henbane. On several occasions he has been obliged to have recourse to the lancet, alarmed by the fulness of the pulse, inflamed appearance of the eyes, and obstinate constipation of the bowels. After the bleeding, opiates had a better effect. Tremors were not always present—the patient seldom complained of headache—the pulse was generally regular, and rather full—yet he has seen it feeble, and nearly imperceptible, the body being cold, and the sweat clammy. In these cases he has resorted to wine and other stimulants. Patients of this kind are almost always bathed in sweat—the tongue usually clean and moist, with great thirst. No case, in our author's practice, proved fatal; and in this, we think, he was very fortunate, for it is a dangerous disease.

In the above Review we observe the report of a discussion on Delirium Tremens, at a meeting of the Westminster Medical Society, in which the Editor, Dr. Johnston, Dr. Stewart, Dr. Copeland, Dr. Ayre and several other distinguished physicians of the British Metropolis, stated the results of their experience. These are altogether in favor of the narcotico-stimulant treatment. In the opinion of all who spoke, opium is the remedy on which the chief reliance should be placed; but most of them allowed the simultaneous exhibition of the same stimulating potation to which the patient had been accustomed.

We also find in the same Journal for August, 1828, an account of a memoir on *le Delire Tremblant*, by Dr. Leveille, which may be regarded as offering a view of the practice in France at the present time. When uncomplicated with arachnitis or gastritis, opium, according to the experience of Dr. L. is quite a specific for this malady, at whatever period it is administered. He gives the medicine in *large* doses. Our author is of opinion that the disease is occasioned by the absorption of alcohol and the application of its molecules directly to the cerebral matter.

In the third edition of his Practice of Physic, (1828) Dr. Gregory sums up the treatment of Delirium Tremens in the following paragraph:—

It is universally admitted that this complaint does not admit of depletion by blood-letting. Much mischief indeed has followed its employment. Leeches however are occasionally useful, and sometimes in its early stage indispensable. The principal aim of the physician should be to calm and support the nervous system, and if

possible to procure sleep. Opium answers all these indications, and must be given in full and frequently repeated doses. Where the complaint can be traced distinctly to the excessive use of ardent spirits, the accustomed stimulus must not be too rapidly withdrawn. Wine or brandy in moderate quantities, should be administered.—Æther, ammonia, comphor, and hyosciamus, have also been found beneficial. It is unnecessary to add, that moderate purging should also be directed, for in so disordered state of the nervous system, the secretions can scarcely fail to be greatly vitiated.

Such are the principal recent notices, with which we have met, relative to the treatment of Delirium Tremens. Our readers will observe, that they all bear witness to the good effects of the opium practice, rather than the emetic. To the efficacy of this practice, we beg leave to add our own humble testimony, having, on the whole, accomplished more with it than any other. We have several times, however, seen excellent effects from the administration of emetics; and when the patient is neither old nor broken down in constitution, we prefer to commence the treatment with a vomit. This will, of itself, sometimes resolve the paroxysm, at other times it effects a useful preparation of the system, and gives greater efficacy to the opium. Indeed, the influence of emetics in augmenting the susceptibility of the stomach, is so great, that we are inclined to think they might be employed in most cases of Delirium Tremens with advantage. They would doubtless facilitate the narcotic effects which we seek to produce, and in many cases do away the necessity of administering drachms of opium. In shattered constitutions, laudanum may be advantageously combined with the emetic.

Of blood-letting we have but little to say. As a general rule, it is not necessary—perhaps not even safe, unless promptly followed by the administration of opium. But the sanguiferous system may be plethoric, or some organ or tissue may be inflamed, when venesection will undoubtedly be necessary. Of purging we would speak in similar language.

30.—*Neuralgias.*—Time was, when a painful affection of the 2d branch of the 5th pair of nerves was almost the only complaint to which the term neuralgia was applied. Matters

are very different at present. The books abound in cases of this malady. From a change in the character of diseases, or from new analytical views, we now have neuralgias of all the limbs, of the trunk, of the viscera, and of the organs of sense. The greatest collection of cases of this kind, which we have seen, has been lately published by the indefatigable Professor Warren, in the second volume of the Boston Medical and Surgical Journal. As the Professor has devoted much attention to this interesting subject, we shall enrich our pages with such an extract from his last communication, as will set forth his general therapeutic conclusions.

General view of the Treatment of this Disease.—The proper treatment will vary in some respects according to the nerve affected. The different cases which have been stated will show what treatment appeared to me most proper in each of the species; but as I do not expect that those into whose hands these papers may fall will take the trouble to read all I have written, I shall condense the most important parts of the treatment in a few words.

The first point to be settled is the seat of the disease, or the precise nerve affected. This can usually be done by the sensation of the patient, and a proper knowledge of the course of the nerves. Next, we must investigate the condition of the digestive organs, and administer proper remedies, if required; since it has appeared that the disease sometimes depends on, and is often aggravated by, a derangement in that part of the animal economy. Then, leeches are to be applied as nearly as possible to the affected part, and repeated two or three times a week; or if the patient is of a weak constitution, or in an exhausted state from disease, the best application would be blisters, employed in a series, for two or three weeks, and of as large size as the part affected will admit. When the patient is full of blood, venesection is very proper; but this is rarely the case. The disease not yielding to these remedies, I should put the patient on a course of Carbonate or Sulphate of Iron. The former, if the nerves of the head were the seat of the disease, in the dose of from one to two drachms, three times a day; the latter, if the trunk or extremities were affected, to the amount of three grains, four times in twenty-four hours, at the same time using the hot douche. After a proper use of such remedies for the space of six weeks, I should propose to excise a portion of the disordered nerve, whenever its situation rendered the operation practicable. Should this not be the fact, then may be employed the other remedies mentioned, especially Conium, Stramonium, and Opium internally, and the cautery, actual or potential, externally.

The following remarks on the nature and treatment of this complaint, occur to me as of sufficient importance to be presented in a distinct form.

1. Neuralgia is a disease of the nerves. The muscles are disordered in a secondary way only.

2. This affection is not confined to the head. All the principal nerves of the body are liable to be affected with it, but superficial nerves more than others.

3. After being subdued on the first attack, it is apt to return on the application of exciting causes, and to become one of the most intractable of complaints.

4. There is no remedy which can be considered a specific cure for it. There is no one remedy that is often successful. It is to be combatted by various agents judiciously adapted to the peculiarities of the case.

5. Of consequence, the Carbonate of Iron is not entitled to the praises which have been bestowed on it; nor is Hemlock, Stramonium, or Belladonna.

6. A surgical operation for excision of the affected nerve is frequently successful in the early part of the disease, and often fails in a protracted case, even when it gives temporary relief.

7. This operation, when successful, is not always followed by immediate disappearance of the paroxysms.

8. The affusion of hot water is a valuable remedy, when the disease is seated in an extremity.

9. The physical and intellectual constitution of the patient is to be studied carefully at first, and kept in view during the whole course of the disease.

10. The patient is never to be abandoned to his sufferings. When the more approved remedies have been tried, the most extraordinary practice is justifiable.

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31. *Colica Pictonum.*—In the Journal of Foreign Medicine, for June, 1829, we find an account of a paper on this distressing and obstinate disease, by Dr. Montanciex. It consists of a series of cases treated in the hospital of St. Antoine, by Dr. Kapelar, with Alum, (*sulphas aluminæ et potassæ.*) This, as our readers are aware, is an old remedy; but it was formerly given in small doses, compared with those employed by Dr. K. Passing over the narrative of cases, we shall transcribe the general observations at the close of the article, in the hope that some of our friends may be induced to give the practice of St. Antoine a full and fair trial.

Thirteen years' experience has proved the value of the proposed remedy, which is both innocent and effectual.

Neither inflammation of the stomach or bowels has ever occurred. In most cases, three or four drachms of the alum were sufficient to

render the patient convalescent, and in no one instance has a relapse happened. M. Montanciex has seen the patients frequently after their discharge, and is therefore able to speak confidently upon this point.

It will be perceived that the requisite dose of the remedy is not always in proportion to the severity of the disease. Cases, which commenced with very alarming symptoms, yielded to two or three drachms; others, which appeared mild in their character, resisted even eight or ten drachms. The physician must therefore act according to circumstances, but the first dose should not be more than one drachm.

The sulphate of alum is asserted to be the best remedy we possess against the metallic colic. We think, observes M. Montanciex, that it will entirely supersede every other medicine, if its effects are impartially compared with other modes of cure.

It is well known, that Colica Pictonum is often followed by paralytic affections of particular muscles, especially the extensors of the hands and fingers. For this disorder we have found nothing so useful as the salino-sulphurous waters so common through the West, and especially in the state of Kentucky.

32. *Flour a remedy for Burns and Scalds.*—Mr. Marshall, an English Surgeon, lately published in the London Medical and Physical Journal, the minutes of several cases of burns treated with flour. We shall transcribe the following as a favorable specimen of the whole.

A boy scalded the left ankle-joint and upper part of the foot. He had applied Goulard's lotion the first two days; and afterwards a dressing, spread on lint, of red precipitate rubbed down with yellow basilcon. Five days after the accident I saw the patient; the part was highly inflamed, and nearly covered with blisters, which had been injudiciously opened, in a state of rapidly spreading ulceration, with a purulent discharge. He could neither use the joint nor bend the toes, being stiff from painful distension. The stimulating dressing was carefully wiped off, where practicable, and the flour substituted. The youth expressed immediate relief. He was directed to apply it every hour during the day, and as often as he awoke in the night, and, wherever the discharge issued through the layer, to apply the flour more assiduously.

Second day.—The patient had passed a good night. Swelling nearly subsided; the surrounding inflammation gone; the ulcers mostly healed; one of them contained a portion of fluid, and another, near the inner ankle, gave out a discharge of matter. He moved the toes and ankle-joint freely. The change was very remarkable.

Third day.—The fluctuating matter that appeared on the preceding day was wholly absorbed. Patient free from pain. The ulcer near the inner ankle gave off a trifling discharge. On removing from the surface the coat of flour to inspect the character of the granulation, it was found in a most healthy and healing condition. The frightful aspect of a general, ill-conditioned, and irritable ulcer, which threatened mischief on the first view, was effectually removed.

Fourth day.—The surface of the part affected was washed in tepid water, in order to obtain a full view of its state. The whole was healed, except two small places, not so large as a horsebean, which were in a healthy healing condition. The new skin was of a red hue, and shining.

On the *modus curandi* of this new treatment, he has the following observations:

This mild substance is doubtless pre-eminent to all others hitherto in use, by imparting immediate ease to the inflamed and irritable surface; it rapidly heals by the scabbing process, in uniting with the discharge from the abraded cutis; and almost instantaneously forms a temporary semi-transparent covering, thereby assisting the natural functions in restoring the epidermis. The advantage becomes evident by stopping a profuse discharge, and the tedious progress of ulceration. That remarkable substance, the animal gluten, peculiarly contained in wheat, seems in this instance to assist the rapid regeneration of the scarfskin, and thus protects the cutis and rete mucosum. The surface of the body being wonderfully supplied by the extension of the cutaneous nerves in the form of a soft pulpy membrane, somewhat resembling the expansion of the optic nerve on the retina, readily affords, it is presumed, an explanation of the great violence offered to the system in all cases of extensive burn or scald.

When the flour has formed the artificial covering, the further application becomes comparatively superfluous; which is perceived by its rolling off.

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33. *Fractures of the os Femoris.*—In the American Medical Recorder for January, 1829, we find a practical paper on fractures of the thigh bone, by an old and experienced physician of Massachusetts, Dr. Josiah Goodhue; in which he gives the following account of a method of making permanent extension of the limb, which he has long and successfully employed.

Let boards be sawn a suitable length to drop in upon the bed-cord, between the head and foot pieces of the bedstead, on which lay a good straw bed or mattrass and a blanket. Then take two common pillows, and after removing half of the feathers, lay them lengthwise

upon the bed, in a position to receive the leg and thigh. Prepare the tail bandage, not quite as wide as the thigh is long, and place it properly upon the pillow on which the thigh is to rest. Place three pieces of narrow tape under each pillow; let a piece of planed board two inches and a half wide, be nailed to the outside of the footpiece of the beadstead, so that the top of it will be two inches higher than the toes of the patient, when the foot lies upon the heel. Let a large silk handkerchief be doubled about three inches wide, and wound closely around the ankle near the foot, and sown with strong thread so that it will not give way in any part. Now after the board upon which the patient rests is placed on the side of the bed, let the surgeon take hold of the broken limb, with other assistance sufficient to lay the patient upon his back, his thigh and leg resting on the pillows. Let two pieces of strong wide tape be sewed to the handkerchief, one on the outside and the other on the inside of the ankle, the tape ought to be a foot and a half long.

The surgeon will now be prepared to extend the limb and adjust the bone, which ought to be done with great moderation and tenderness, as I know from long experience, that violence is quite unnecessary. Then let a strong man stand at the head of the bed, and place his hands with firmness under the patient's arms, so that the body may not be drawn down when the extension is made. I should advise the surgeon to make the first extension in a very slow, firm, and gradual manner, he will find that by continuing the extension for two or three minutes, he will gain more, than by ten times the force applied with sudden violence. I would now give the limb into the hands of a trusty assistant, and place my hands upon the fracture. As it is impossible to give directions with regard to the coaptation of the ends of the bone, I shall leave that part to the ingenuity of the operator, he bearing in mind that hard pinching is never necessary. The tapes attached to the handkerchief may now be tied with firmness round the footpiece. A double cloth may be wet with a solution of the sugar of lead or rum and water, and applied to the thigh, the tail bandage being nicely, but not tightly folded. Then let the foot of the bed be raised, so as to place two bricks flatwise, under each post. The extension may now be discontinued. It will be seen that the patient lies upon a gently inclined plane, with his foot firmly fixed, which is all that is necessary (with constant care) to keep the bone in place. Splints of every kind, in this way of proceeding, are entirely useless.

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34. *Test for Prussic Acid.*—Dr. Edward Turner, Professor of Chemistry, in the new London University, in a letter to the Editors of the Edinburgh Medical and Surgical Journal, for October, 1828, after considering the relative value of the nitrate of silver, the sulphate of copper, the per-sulphate of

iron and the proto-sulphate of the same metal, gives a decided preference to the last; as may be seen by the following extract:—

The proper test of prussic acid is the common proto-sulphate of iron, the green vitriol of commerce. If recently prepared, the precipitate left after dissolving the excess of oxide will at first be green, and become blue after exposure for a few minutes to the air. But if the solution has been previously kept for some hours in an open vessel, so that it may contain both oxides, perfect Prussian blue will be formed at once. The proto sulphate of iron, even in cases of judicial inquiry, is the only chemical re-agent required. M. Lassaigne recommends the sulphate of copper as a re-agent twice as delicate as per-sulphate of iron—an opinion which is quite correct. But it is considerably less delicate than the proto-sulphate, and besides, the white tint of the cyanuret of copper is far less characteristic than the rare and well marked color of Prussian blue. Sulphate of copper, as a test of prussic acid, is therefore unnecessary. These remarks render it probable, that, in animals killed by prussic acid, the poison may be detected at longer periods after death than was observed in the experiments of M M. Leuret and Lassaigne.

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35. *Depletion a cure for Gangrena Senilis.*—As far as we know the prevailing treatment of this malady, in America, is that of Mr. Pott—the liberal administration of opium. But one case has presented itself in our practice, and it proved fatal under the aforesaid method. In the Medico-Chirurgical Review for Jan. 1829, we find some account of a memoir on this disease, by Dr. Victor Andry of Paris, which we think deserves to be transferred to our columns. By the way, we may remark, that gangrene, in all its varieties, is far less common in Cincinnati, than it was twenty or twenty-five years ago. To what cause or causes, this should be ascribed we are not prepared to say. It may, perhaps, be owing to improved modes of treating inflammation, or to a change in the occult qualities or constitution of the air, or to both. Of one cause only can we speak with the confidence of being correct. It is the more sparing application of *blisters.* We can recollect when these cruel applications were resorted to with the greatest recklessness, in states of high vascular excitement and exalted sensibility; in the early stages of acute inflammation; in hopeless organic affections; and in

conditions of exhaustion and extreme debility. Under all these circumstances, the blistered surface was liable to mortification. But we must return to the promised extract.

Doctor Victor Andry has lately published a long memoir on Gangrene, and more especially the spontaneous, or Senile Gangrene, described by Pott, and other writers.

The Doctor undertakes to demonstrate that all gangrenes, under whatever form they present themselves, are referrible to one proximate cause—the cessation of the circulation in the part affected. All the occasional causes of gangrene, he maintains, act in the same manner, namely, by producing a mechanical obstruction to the course of the blood, or inflammation of the vessels themselves. This last, he avers, is the most frequent cause of gangrene, and that by interruption of the circulation. The experiments of Kaltenbrunner, and many others, prove that, in all inflammations, there is a portion of the part inflamed, in which the circulation is nearly, if not quite stagnant. If the inflammation be very violent, or if, from some other cause, the circulation be not re-established in the minute vessels, gangrene, of more or less extent ensues.

In respect to the gangrena senilis, or Pott's gangrene, Dr. Andry observes that the cessation of the circulation, in consequence of inflammation of the vessels, has not been generally acknowledged as the cause. Although the disease is certainly much more frequent among old than among young people; yet it is occasionally seen in all periods of life—and, in all cases, he maintains, it is owing to inflammation of the veins. M. Baffos lately communicated to the Royal Academy of Medicine, the case of a young woman, twenty years of age, affected with dry gangrene of the feet, attended with excruciating pains, but without any change in the color or in the temperature of the skin. On dissection, the veins of both the lower extremities were found inflamed, and filled with a kind of substance that adhered most tenaciously to the internal surface of the vessels. M. Leveille has reported a somewhat similar case. The spontaneous gangrene was seated in the left leg. On dissection, they found the external iliac artery and the crural vein intensely inflamed and very much thickened, being lined with a fibrinous substance which did not, however, obliterate the calibre of the vessels.

The doctrine of ossification of the arteries, as the cause of gangrena senilis, is not always borne out by facts. Bichat has shewn that, in few individuals, after the age of 60 years, are there wanting traces of ossification of the arteries. In fact, there are many cases recorded, where the arteries of limbs were completely ossified, without any symptom of gangrene being present.

Without stopping to examine the spmptoms and progress of this painful and generally fatal disease, we shall come at once to the principles of treatment—principles which flow naturally from the proximate cause here laid down.

"When then," says the author, "severe pains have preceded the appearances of gangrene, with hard and full pulse, watchfulness, &c. we may conclude that there is inflammation of the arterial or venous coats, and we ought to have recourse to blood-letting, both local and general, if the strength of the patient will permit, together with stimulating frictions and fomentations on the surface of the parts threatened with gangrene."

The following case, communicated by M. Dupuytren, from the Hotel Dieu, will put the good effects of depletion in a clear point of view.

Case. A female, aged upwards of sixty years, was received into the Hotel Dieu, and there remained nearly a year, for the treament of Gangrena Senilis, affecting the toes of the left foot. Acute and long continued pains had preceded the gangrene, and deprived the patient, for some months, of sleep. The toes of the foot were like those of a mummy, while the neighboring parts were of a violet color, and emitted an insupportable smell. For the first few months of the patient's sojourn in the Hospital, opium, bark, and a variety of remedies were tried, without the least benefit. On the contrary, the disease made progress. The whole foot, soft and hard parts, were stricken with gangrene. The state of the heart, the lungs, and the great arteries was carefully examined, but no deviation from healthy function could be discovered, M. Dupuytren now, being tired with the various anodyne and tonic remedies usually employed, determined on opposite measures. Eight ounces of blood were taken from the arm. The pains were mitigated—and some sleep was procured. In fact, the patient experienced more relief from this bleeding, than from all the other remedies put together. This amelioration lasted nearly a fortnight, when the pains began to resume their former severity. The bleeding was repeated, and with the same good effects as before. After this, phlebotomy was had recourse to, whenever the symptoms were distressing; and by this measure, the progress of the gangrene was arrested, the mortified parts separated, and the patient was discharged cured.

Since the above period, a great many people affected with gangrena senilis have been treated in the same manner, and always with success. M. Dupuytren concludes by recommending the depletory treatment, whenever the disease is attended with severe pain, considerable tumefaction of the neighboring parts, fulness and hardness of the pulse, and flush of the face. We think there can be no doubt that this is sound advice.—*Journal de Progres.*

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36. *Angina Pectoris. Nervous System.*——Having long thought the nervous system primarily affected in all diseases not arising from mechanical violence, we are too much pleased with the following remarks of the Editors of the Medico-

Chirurgical Review, (January, 1829) not to recommend them to the perusal of our readers; especially the younger class, whose pathological views have not yet become immoveably anchored by a weight of prejudice and error. The writer after giving an account of a case of Angina pectoris reported in Dr. Farre's semi-annual journal, concludes with these remarks:

That the disease termed angina pectoris may depend on more than one pathological condition of the heart cannot now be doubted; but, that it is, in the great majority of instances, a neuralgic affection of the organ, we firmly believe. In most of the cases which we have had an opportunity of examining, the muscular structure was flabby and wasted—or loaded with fat. What do we see in neuralgic affections elsewhere? Wasting and weakness of the muscles. Death, in an angina pectoris, we believe to result from one of two conditions—spasm, or momentary paralysis of the organ. From spasm, when the patient dies in agonies, as is sometimes the case—from momentary paralysis, when he dies instantaneously, without suffering. In the latter case, it is of *syncope*, in fact, which the individual expires—and the disease, indeed, has been denominated "syncope anginosa." Why should we wonder that the heart may be affected with temporary paralysis, as well as other muscles? There is scarcely a muscle in the body, voluntary or involuntary, that has not been found to be the seat of temporary paralysis.—This temporary loss of power in the heart, must of course, be fatal, if it last beyond a certain time. In common syncope, from emotions of the mind, loss of blood, or other causes, power is restored before the vital spark is fled—though not always, for death sometimes takes place, even from this momentary cessation of action in the central organ of the circulation. It is hardly necessary to say, that to attribute the disease, in the case above narrated, to the specks of ossification on the coronary arteries, when other and far more serious lesions were discovered, (though perhaps still more lay behind) on dissection, is a sad specimen of philosophising in medicine! We would recommend to those young aspirants for professional fame, who are, as yet, unencumbered with the harrassing duties of private practice, to direct their attention to the pathology of the visceral nerves. We cannot indeed, expect to discover the causes of functional disorder in the nervous system so readily as in the arterial system; but still we believe there is much appreciable lesion to be detected by accurate dissection. In the mean time, we cannot but deplore the rage for tracing disorders of the human machine entirely to physical alterations of structure, knowing as we do, that all diseases, or almost all, originate in disordered function, connected with, if not entirely dependent on the nervous system. According, indeed, to some modern medical philosophers, the brain and nerves

are almost useless parts of the animal machine—while the mechanical or physical agencies are every thing. The laws of hydraulics and chemistry are soon to supersede the laws of vitality—and the *morale* is soon to be absorbed in the *physique.*

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37. *Metallic Ligatures in Surgery.*—The 7th No. of the Amer. Journal of Med. Sciences, contains an interesting experimental paper on metallic ligatures, the use of which was first suggested by our celebrated countryman Dr. Physick. The author is Dr. Levert of Alabama. His experiments were on the carotid and femoral arteries of dogs, and seem to have been executed with care. They were made with four different kinds of wire—lead, silver, gold and platinum—all metals difficult to oxydize. After exposing the artery, the wire was carried once round it, and drawn so tight as to obstruct the circulation, when the ends were cut off, and the wound closed up, to heal by the first intention; which however did not always happen. But whether it granulated or not, he invariably found on examining the part after it had cicatrized, that the calibre of the vessel was obliterated, and the wire enclosed in a cyst of dense cellular substance. There was neither suppuration nor inflammation in its vicinity.

For the purpose of comparison he employed, in other experiments, ligatures of silk, elastic gum and grass. The wounds healed up, but he found, on examination, that the ligatures of the two former substances were surrounded by pus; those of grass were enclosed in a cyst, which, however, was moist and uneven, and did not embrace them closely. On the whole, Dr. L. concludes, that the plan of tying arteries with lead and other metals (not easily oxydated) is free from danger, and may be productive of some peculiar advantages; but that more experience and a greater number of experiments are necessary to establish this point thoroughly.

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38. *Treatment of the Cutaneous disease produced by certain vegetable poisons.*—Dr. Dakin, of Columbus, N. Y. (American Journal of the Medical Sciences, No. 7) informs the profes-

sion, that he has uniformly cured the diseases produced by the exhalations of the different species of RHUS, or poison vine, sumach, and poison oak—

By blood-letting, cooling laxatives of neutral salts, and the following unguent as a local application:—℞. Cupri sulph. ʒi.; Precip. mer. rub. ʒi.; Tereb. ven. ʒiij.; Axung. porc. ʒi.—M. ft. ungt.

On the slightest admonition that the disease is contracted, I abrade the cuticle, or open the pimples, and apply a small quantity of the ointment, which occasions a slight smarting, but agreeable, compared with the tormenting sensations attendant on the affection. One or two applications with about twelve hours intervening between them, will arrest the inflammation, and in three or four days all marks of disease are generally obliterated. Venesection is rarely necessary, except the eyes, scrotum, or some important organ be concerned.—The above ointment is most efficient in arresting the progress of the complaint if applied the day of its appearance; and though neglected for two, three, or four days, will generally give prompt relief.

The affected parts should be kept cool, and the patient be ordered not to handle his body, without first washing his hands, after touching the sores, as he might thus unconsciously inoculate other parts.

We recollect that many years ago this affection attracted the attention of the late Professor Barton, who employed for its cure a solution of corrosive sublimate—deuto-chloride of mercury. Of the relative value of this application and that of Dr. Dakin we are unable to speak experimentally.

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39. *The London University.*—Many of our friends may not be aware, that London, which most Americans regard as an emporium of letters and science, not less than politics, fashion and trade, has never had a University, for literary, scientific, or *medical* instruction. Nevertheless, the number of students of physic and surgery annually congregated, in that immense city, has not been small; but they have been drawn thither by the undefinable attractions which a great capital exerts; by the number and extent of its public hospitals; and by the merited renown of its physicians, surgeons, obstetricians, and pharmacopolists. It had long been perceived, however, that an *organised* faculty–a confederacy of teachers—was a *desideratum* in the metropolis; but difficulties, into which it is not our purpose to inquire, prevented, till lately, the

consummation so earnestly desired, by the enlightened and liberal minded portion of our British brethren.

The London University, for some time a mere project, has at length been *established;* and the first session of its Medical Department, commenced with the month of October, 1828. In the last number of the Medico–Chirurgical Review, (January, 1829) we find an ample and interesting account of the initial series of introductory lectures. But two of its seven professors are well known to the profession in America, and they are both Scotchmen. Whether any more are from the 'Northern hive' of poets, critics, metaphysicians and physicians, we are unable to say.

The Faculty consists of

Mr. Charles Bell, *Surgery.*
Dr. Granville Sharpe Pattison, *Anatomy.*
" Conolly, *Institutes and Practice.*
" Davis, *Obstetrics.*
" Watson, *Clinical Medicine.*
" Thompson, *Materia Medica.*
" Turner, *Chemistry.*

The Editor is liberal in his applause of each introductory lecture; and does not hesitate to predict, for the new institution, the most brilliant success. The name of Charles Bell, alone, would inspire confidence on this side of the water; while that of Mr. Pattison, the same gentleman who lately filled the chair of Anatomy in the University of Maryland, affords no inconclusive evidence of sound eclectic views in the Regents of the University. Dr. Thompson, Dr. Turner and Dr. Davis (the first especially) are advantageously known in this country; but of Dr. Conolly and Dr. Watson we know but little, and theirs are certainly not the names, which *a priori*, we should have expected to see placed before the important professorships of theoretical and practical medicine. The Editor, however, speaks of them in such language as compels us to believe, that the medical department of the new, or as he calls it, the People's University, must speedily attain to a high rank among the most celebrated schools, which so pre-eminently distinguish the nineteenth century. The

number of pupils already entered was said to be very great—indeed three times as great as was anticipated.

The time was, when such information as we now communicate, would have been of practical advantage to the students of America, but that era, happily, has passed away, never to return. We no longer look to Europe, for the education of the business and working members of the profession. The most numerous and useful, if not the most accomplished physicians and surgeons of the United States, are now educated at home, never visiting the old world in any stage of their studies; and, although many of them are *badly* educated, there is little real necessity for going abroad. The brevity and laxness of study, to which their defects may be fairly ascribed, once corrected, they would become profound and elegant practitioners, without foreign assistance; while left uncorrected, all the vaunted opportunities of Paris, Edinburgh and London, would be lost upon them.

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40. *Fatal Illness and Dissection of Dr. Gall.*—Believing that most of our readers, like ourselves, feel a laudable curiosity to know something of the last illness and *post mortem* appearances, of men distinguished in the profession; we shall extract from Johnson's Review for January, 1829, a condensed account of this kind, relative to the celebrated Dr. Gall, whose death we announced in a former number of this Journal.

Dr. Gall was above the middle stature, having an expanded chest, strong muscular extremities—large head—high forehead—open and pleasing countenance. Endowed with a most vigorous constitution, he was able to dedicate a long life to deep and almost incessant study, with trifling inconvenience to his bodily health. Two or three attacks of the gout, and the same of gastro-intestinal disorder, were all that he experienced till of late years, when his gait became heavy, and his breathing short, while ascending any eminence, or even his stairs. To this was added palpitation. About eighteen months preceding his death, these symptoms had increased, and obliged Dr. G. to keep very quiet, to live low, and lose blood several times.—Messrs. Rostan, Andral, Dennisi, and Robouam, examined Dr. Gall's chest repeatedly by the stethoscope, and recognized hypertrophy with dilation of the heart—especially of the left ventricle. By the means above-mentioned, Dr. G. got something better, and resumed his usual occupations. In November last he commenced his course

of lectures at the Athenæum, and continued them till April of 1828. On the third of that month, he experienced some symptoms of cerebral congestion—and on the 20th of the same month, there was incomplete hemiplegia of the right side, which remained in despite of the usual means. In the month of May, the Doctor had recourse to some active purgatives, which produced a prolapsus of the rectum, and hæmorrhoidal tumors. Electricity, acupuncturation, and other means having failed, Dr. G. determined on change of air and repaired to Montrouge. Here he continued to be affected with nausea, loss of appetite, &c. and took an emetic which operated upwards and downwards, and brought on a slight attack of gout. But the redness and dryness of the tongue, and the irritability of the stomach, clearly showed that the digestive apparatus was the seat of disease, and M. Broussais was added to the list of consultants. This gentleman gave an unfavorable prognosis, which was but too soon verified. It was remarked—and was certainly very remarkable, that throughout the whole of these attacks, even that of gout, there was no symptom of re-action, or of febrile movement. On the 6th of August, Dr. G. experienced a chill, which was not succeeded by any re-action. Next day, (7th) there was a violent rigor of an hour's duration, and this was followed by some febrile movement, and ultimately by perspiration. The patient now insisted on taking sulphate of quinine, which he took to the amount of twenty grains in twenty-four hours. Dr. G. still preserved the full possession of his intellectual faculties, and his countenance presented a natural aspect. The pulse, which had been irregular, now ceased to intermit. He was able to take chicken and chicken broth with ease. During the next four or five days, the quinine was continued, at the rate of 24 grains a day. The patient ate and digested each day—but now the cheeks began to exhibit some flush, the eyes altered their expression, and the ideas wandered. On the 14th, the tonic plan was changed for the soothing, as the head was evidently affected. He now sunk into a comatose state, from which he never emerged. On the 21st of August, Dr. Gall paid the last debt of Nature!

Post-mortem examination.—The head was very large, as we before observed—the cranium was remarkably thick, at least double the natural thickness. The channels of the dura matral arteries were remarkably deep—pia mater infiltrated with serosity, and several ounces of water were found at the base of the skull. The brain was not dissected, but preserved in spirits. It weighed two pounds ten ounces and a quarter, French—little under three pounds English. There was a small tumour near the surface of the cerebellum.—The interior condition of the brain could not, of course, be ascertained. In the chest, the lungs were found to be perfectly healthy—heart one-third larger than natural, being flabby in texture, and containing a considerable quantity of blood. The chambers were larger than natural, and their parietes thickened, especially the left

ventricle. The arch of the aorta was dilated, and the internal surfaces of most of the large vessels were red, not the effects of imbibition. The parieties of the stomach were generally thickened, and the mucous membrane red, soft, hypertrophied, and, in some places eroded. The lining of the duodenum, and small intestines was nearly in a similar state. The gall-bladder contained numerous calculi, and was divided into two pouches quite distinct.

Such are the particulars of Dr. Gall's death. It is evident that he did not die of the affection of the heart. Whether the large quantities of sulphate of quinine, taken when the mucous membrane of the stomach and bowels was in a state of inflammation, may have accelerated Dr. Gall's death, by determining to the head, admits of doubt—or rather it admits of little doubt.

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41. *Death of Professor Gorham.*—We are indebted to the Boston Medical and Surgical Journal, for an interesting account of the life and death of this very respectable physician and public teacher. He died at his residence, in Boston, on the 27th of March, 1829, after an illness of four or five days. His disease was an inflammation of the pleura and inferior lobe of the lung, of the left side. On examination after death, the surface of the pleura was found covered with coagulated lymph, and extensively agglutinated to the lung, the lower parts of which were solidified, and resembled boiled lung moderately compressed.

Dr. G. was in middle life. After graduating in the Arts, at Harvard University in 1801, he studied medicine with the elder Professor Warren. He then spent two years in Europe, and on his return married the daughter of his preceptor. Soon afterwards he was appointed adjunct to the late Dr. Dexter, professor of Chemistry in his *alma mater*; and while in this situation delivered, with approbation, several courses of popular lectures on his favorite science, to the citizens of Boston. Meanwhile he began to acquire an extensive and profitable business as a physician.

In the year 1811, his colleague having resigned his office, Doctor Gorham was chosen Professor of Chemistry and Mineralogy in the University of Cambridge, and continued to give lectures in Boston and Cambridge till 1827, when the great increase of his business led him to resign this post, and devote himself wholly to private practice. During the time of his Professorship, he published a val-

uable System of Chemistry, in two octavo volumes. He wrote many papers in the New England Journal of Medicine and Surgery, of which he was a joint Editor for about fifteen years, and contributed also to the Boston Medical and Surgical Journal. He lent his aid to the improvement of Medical science, by serving as Recording Secretary of the Massachusetts Medical Society, and held various other offices, which demanded labor and ability. He was to have delivered the next annual discourse of the Massachusetts Medical Society. His practice regularly increased till it became so great as to require efforts and exposures which predisposed him to disease, and threw him in the way of its exciting causes.

The remarks of the Editor on the moral and social character of the deceased, we shall transcribe for the benefit of the younger members of the profession.

Dr. Gorham had arrived at the period of life when a good physician is most valuable to the community; at the period, when to learning is added personal experience, when the judgment is mature, and when the confidence, not of a few individuals only, but of the public at large, is secured and settled. He was a good physician indeed, and the community realised his worth. He was in the midst of a full business, and ardent in the prosecution of it. He obtained not only the confidence but the love of his patients, and enjoyed at the same time the respect and good will of his professional brethren.

Justice may call on us to say so much, and would permit the use of stronger terms. For the benefit of survivors, it may be proper to inquire how he obtained so much respect, confidence, and good will. It was by dilligence and fidelity in seeking for knowledge and in using it; by rectitude in principle and urbanity of manners. But he had a charm, which these words do not describe, and which was felt by all who knew him. This charm arose from the simplicity, if it may be so termed, which marked his character. Frank and open-hearted, free from selfish propensities, he sought to make others happy, without thinking of the merit of it; and he succeeded; for his face, truly beaming with benevolence, cast a bright light on those around him, while his kind feelings begat a sympathetic good will among his friends and companions.

The Funeral ceremonies were conducted in a manner correspondent with the character of the deceased, but our limits forbid us from adding more, than that professor Jackson pronounced his eulogy, "in a simplicity and elegance of style admirably suited both to its subject and its author."

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42. *Death of a Centenarian.*—The journal just quoted, has announced the death of the venerable Edward Augustus

Holyoke, M. D. & L. L. D. aged a hundred years. We have given some account of the honors which the members of the profession in Boston and Salem did themselves the *honor*, a few months since, to pay to this—the oldest physician of the new world. We have made arrangements to obtain an original sketch of the life and character of the deceased, for insertion in a future number.

III. ORIGINAL.

43. *Small Pox.*—During the past winter the small pox prevailed to some extent in Pittsburgh, whence cases of it were introduced into several towns on the Ohio below, but as far as we have learned, it did not spread in any of them. Nine persons infected with it, reached Cincinnati at different times, and were all sent to a house provided for their reception in the vicinity of the city. No one contracted the disease from them. The arrival of these individuals excited some salutary alarm, and led to a revival of the practice of vaccination. Physicians were appointed by the Council to vaccinate all the unvaccinated in the different wards of the city, and were paid out of the public treasury, for attending on those who were unable to make compensation. This was right, and we hope the Council will consider it their duty to do the same thing annually. We also hope, that they will repeal the ordinance providing for the removal of infected persons from the city, and make it publicly known, that henceforward the people must depend on vaccination, alone, to protect them against the contagion of small pox. By such a regulation, coupled with appropriations for the benefit of the poor, we might hope to keep the number of liable persons so small, as effectually to preclude the small pox from becoming epidemic.

It was not without concern, that, while the subject was agitated, we found so many persons unsettled in their opinions respecting the preventive power of the vaccine disease. We have even been told, that there are physicians in the Western

country, who inculcate doubts on this subject. That the *people* should want perfect confidence is not remarkable, seeing that most of them have had no opportunities of witnessing the efficacy of the vaccine in preventing the variolous disease; and that most of them are ignorant of the historical evidences of its virtue. The profession must inform them.

As domestic proofs are always more convincing than foreign, we take this opportunity of saying, that during the winter of 1828—9, and two years before, when a still greater number of cases of small pox were introduced here, no person (as far as we know) who had been vaccinated, contracted the disease, although many such were exposed. In both instances the nurses and physicians in daily attendance, confided entirely in their previous vaccination, and escaped the disease. The Editor of this Journal, in the discharge of his duty as President of the Board of Health, was several times exposed with impunity, although more than a quarter of a century had elapsed since he was vaccinated. Other medical gentlemen, belonging to the same Board, were likewise exposed and proved to be equally unsusceptible. One of the cases which lately occurred, was peculiarly interesting in reference to this question. Two young mechanics, brothers and natives of New England, on their way to Cincinnati lodged one night in Pittsburgh, where the small pox was epidemic. Soon after reaching this city, one of them was taken down with that malady, and sent to the small pox house, where there were other patients at the same time. The brother attended him as a nurse, lodged on the same bed with him, and performed every kind of personal services till he died and was buried. Now the deceased had never been vaccinated, but the surviving brother had, and to this only can we ascribe the difference in their fate.

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44. *Fatal effect from Vaccination.*—Having heard that a citizen of Cincinnati fell a victim to the vaccine disease in the month of January, we requested of Dr. J. K. Sparks,

one of the vaccinators of the poor, to furnish us with some account of the case, and are enabled to lay before the profession the following statement, extracted from his letter:

"On the 21st January, 1829, I vaccinated Mrs. Fisher and her three children. The night of the 26th of the same month Nymphis Fisher, her husband, *who had been vaccinated and had the disease regularly many years before*, took matter from his little daughter's arm, and with the point of a pin vaccinated himself. Within two or three hours the place began to itch and pain him; he was chilly and had a restless night.

Tuesday, 27th, he attempted to gather ashes with his cart (for that was his daily business) but before noon he was so unwell that he returned home and took to his bed. His wife poulticed his arm and gave him a dose of medicine, but he still got worse.

Wednesday, 28th, in the afternoon I was sent for, but it was night before I saw him. His tongue had a thick bilious coating; his skin and eyes were yellow; his pulse frequent, and he was very restless. On the left arm above the elbow, where he was vaccinated, there was a tumour as large as an ordinary hen's egg, and almost as abrupt in its figure as if one had been inserted into the cellular membrane under the skin. I first gave him a purge of calomel and sulphate of magnesia; then small doses of calomel and Dover's powder, with a subsequent purge of compound powder of jalap.

Thursday, 29th, I applied the roller bandage, beginning at the ends of the fingers, and continuing it to the arm-pit; which arrested the swelling for a time. The alterative and cathartic medicines were continued.

Friday, 30th, a thin, yellow, fœtid matter began to discharge from about the tumour. The above treatment continued.

Saturday, 31st, the fœtid matter was more copious, and the muscles of the arm were flaccid, and would hang down when the bandage was off. The same prescription continued.

Sunday afternoon, 1st February, the whole arm greatly swelled, I applied blistering plasters, which covered the arm generally, from the shoulder to the wrist, and put the bandage pretty tight over them. Sulph. quin. and Port wine were ordered.

Monday, 2d, the plasters had acted well, and where there was but little pressure the blisters were fiilled with yellow matter. The arm was dressed with a mild ointment. Brandy and bark were given freely. Dr. Slayback was called

in—recommended a weak ley poultice to extend from the shoulder to the wrist.

Tuesday, 3d, a stronger ley poultice was ordered, which irritated the arm so much, that he refused to let it stay on. A yeast poultice was then applied to the whole arm. Gangrene had taken place above the elbow, and it was much swelled to the hand.

Wednesday, 4th, the bark and brandy were continued and the yeast poultice reapplied. But as the vital powers gave way, the gangrene and mortification extended over the whole limb. In the latter part of the night he died.

My opinion is, that if Mr. F. had not been vaccinated he would have had an attack of illness, which might have proved fatal as he was a weakly man; but the vaccine matter, (though genuine as was proved by its acting favourably on his little daughter) was poisonous to his disordered system."

May, 1829.

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45. *Extensive cellular inflammation from Vaccination.*—We are indebted to Dr. Joseph N. McDowell, of this city, for the following memorandums of an interesting case which lately occurred in his practice, and fell under our own observation:

"In January last, says he, during the alarm excited by the small pox, I vaccinated Mrs. W——, about sixty years of age, possessing a good constitution, and, for that time of life, remarkably active. She was subject, however, to attacks of dysentery, which, at different periods of the year confined her for several days. The virus used, was such as had been successfully employed among all my patients, and was inserted in the arm in the usual manner by raising a small portion of skin with the point of the lancet and placing it underneath. Three days after the insertion of the infection, I returned to see whether it had taken effect; when I found her arm much inflamed, and learned that the night after her vaccination, she had been taken down with dysentery, which was attended from its commencement with fever. The unusual inflammation excited in her arm, she attributed to her having inadvertantly scratched it. At this time her dysentery still continued; her pulse was active, tongue furred, and she had great thirst. I urged her to be bled and take medicine. She consented to the former, but obstinately refused to do any thing more for several days, during which time the inflam-

mation greatly increased, and her situation became alarming. I again visited her in company with Dr. Drake, when we prevailed upon her to submit to our directions. Her arm was, at this time, almost double the size of the other, and inflamed from near the shoulder to the ends of her fingers; and notwithstanding all our exertions, an extensive suppuration in the cellular membrane took place. The integuments were broken at four different places on the arm, and at two others on the fore arm, near the lower end of the radius. Between the elbow and the wrist they were entire; but from the extensive suppuration, they were separated from the muscles and hung loosely down when the arm was lifted up. During this stage of the disease, she was extremely irritable, and required to be kept constantly under the influence of opium, with tonics and aperients. The skin being widely separated from the muscles, there was danger of its being lost by sloughing. To prevent this I resorted to a bandage, extending from the ends of her fingers above the elbow, for the two fold purpose of reducing the œdema, and bringing the muscles and integuments into contact. Its effects were salutary, and it was, consequently, continued for some time. The orifices in the skin continued for a while as indolent running sores; but in the end were excited to healthy action, and healed up. From the excessive inflammation and suppuration she suffered a partial loss of power in the muscles of the hand; for a time was unable to move her fingers in any direction, and even at present is considerably infirm.

Cincinnati, June 25, 1829.

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46. *Bath Chalybeate Spring.*—In the 3d No. of our 2d vol. we gave an extended account of several mineral springs in Kentucky and Ohio. Many others are known to exist in the western states; and, doubtless, but a part of them have yet been discovered. Regarding it as important for our practitioners of medicine, to be informed of the location and composition of these *fountains of health*, or, at least, *waters of hope and cheerfulness*, we shall, from time to time, announce those of which we can speak from personal observation, or from information on which we can rely. At present we shall confine ourselves to a brief notice of a chalybeate spring, which has received the name prefixed to this article. It is

situated inUnion county Indiana, about 8 miles from Brookville, and 44 from Cincinnati.

We have been furnished with a specimen of its waters, and have ascertained, that they are impregnated with the protocarbonate of iron, and are identical, in composition, with the waters of the 'yellow spring,' in Ohio, and the chalybeate vein, at the Olympian springs, in Kentucky; of both of which, we have given some account in the paper already mentioned.

From Dr. Dunlavy, a respectable physician of Hamilton in this state, we have received a short topographical and geological account of its situation. The scenery is pleasant and romantic; and the spot itself with the surrounding country healthy. The spring bursts out from a high alluvial bank, and in its course deposits a sediment of per-oxide and carbonate of iron, like the 'yellow spring;' while the calcareous rocks beneath, are of the same variety with those observed at the latter fountain.

On the whole we may recommend this new watering place, to all who may find its location convenient; and are authorized to assure them, that comfortable accommodations have been already made for their reception.

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46. *First District Medical Society, of Ohio.*—The annual meeting of the Society, was held in this city on the 26th of May. As most of the business was local, we shall notice but two or three of its acts.

CAPITATION TAX ON PHYSICIANS AND LAWYERS.

Two or three years ago, the General Assembly, in their wisdom, levied a poll tax on the members of these two ancient and honorable professions. It could not be less than five, nor more than fifty dollars *a head*, according to the good pleasure of the Court of Common Pleas, of each county. Here was a genuine case of *legal* and *forensic* medicine; and the consultants were drawn from both professions. The gentlemen of the Bar pronounced the law *unconstitutional*, and they of the faculty declared, that it would seriously impair the integrity of the *constitution;* so both parties agreed, that

the interests of liberty, not less than those of the two learned professions, demanded its immediate abrogation. To effect this, the lawyers *demurred*, and the doctors advised that the *sphincter bursæ* of every individual, should be kept in a state of constriction. But all would not do. The Supreme Court declared the law constitutional, and the *stomach pump* of the sheriff has already found its way to the bottom of many a purse, which had been firmly closed upon a sum scarcely large enough to satisfy the original demand with the interest which had accumulated upon it. In this *critical stage* of the disorder, the *vis medicatrix* of the first District Society, has again re-acted, and given birth to the following resolution, which we seriously recommend to the attention of all who are interested.

"*Resolved*, That a Committee of seven members be appointed to draft and present to the next General Assembly, a remonstrance against the *statute* imposing an annual tax on the physicians of the state, and a memorial proposing for a repeal of the same; and that they be instructed to request the co-operation of the other District Societies recommending that they transmit their memorials to the President of the State Society, to be by him laid before the General Assembly: Whereupon, Doctors Drake, Warren, Hunt, J. H. Brower, Hough, Wayland, and Hopkins were elected said Committee."

Resolution against Intemperance.

"On motion of Dr. Warren, it was *unanimously resolved*, That the Society view, with deep regret, the prevalence of an intemperate use of spirituous liquors, and their baneful effects upon the human system; and do hereby pledge themselves to use every exertion in their power to suppress intemperance, both by precept and example, whenever opportunity offers."

Officers of the Society for 1829.

Daniel Drake, M. D. *President*,
Edwin A. Atlee, M. D. *Vice President*,
Vincent C. Marshall, M. D. *Corresponding Secretary*,
James Warren, M. D. *Recording Secretary*,
Melancthon Rogers, M. D. *Treasurer*,
Isaac Hough, M. D. *Librarian*,
Doctors Vincent C. Marshall, John Woolley, William Wayland, Jeremiah H. Brower, and Isaac Hough, *Censors*.

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